



National Toxicology Program
Department of Health and Human Services

NTP Historical Controls Report

By Route and Vehicle

Harlan Sprague-Dawley RATS

November 2019

REPORT DESCRIPTION

This report shows the tumor rates of control group animals from selected studies. The studies used are shown on the Study Summary page.

This report is broken up into sections based on the route and vehicle used to deliver the chemical. The Table of Contents on Page 3 shows the different Route/Vehicle combinations. To see the data from all routes and vehicles combined into one set, you must run the "All Routes" report.

The individual tumor rates shown on the data pages of the report relate to the Study Summary page as follows: the tumor rates are shown in the same order as the Study Summary page, except that they are grouped horizontally in sets of three, with the males in the first set of three and the females in the second set. For example if the study summary showed the studies like this:

Male

M1

M2

M3

M4

M5

Female

F1

F2

F3

F4

F5

the data would be shown as:

Male			Female		
M1	M2	M3	F1	F2	F3
M4	M5		F4	F5	

Directly beneath the individual tumor rates on the data pages are the overall totals for that tumor/site combination. This includes the total tumors/animals, the overall mean (in parentheses), the mean of the study means, and the standard deviation of the study means.

Studies with no control animals of a particular gender are listed on the summary page with the Number of Animals shown as zero and the Start Date and Length of Study shown as "N/A". On the data pages there are blank spaces where tumor rates for these studies would normally be found, so that the male and female rates for the remaining studies can be easily compared.

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Version: Nov2019
Contract/Lab: All Laboratories
Species: RATS
Strain: Harlan Sprague-Dawley
Length of Study: CHRONIC

Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
Route: GAVAGE
Vehicle: CORN OIL

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Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
Battelle Columbus Laboratory	052000603	03/14/07	727	50(3)	20(644)	584.8	Indole-3-carbinol
Female							
Battelle Columbus Laboratory	052000603	03/15/07	729	50(5)	21(637)	353.0	Indole-3-carbinol

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male			Female		
#All Organs:							
Benign Tumors							
		27/50 (54%)			40/50 (80%)		
Overall Incidence	Total	27/50 (54%)	Mean 54%	SD 0%	Total	40/50 (80%)	Mean 80% SD 0%
.....							
#All Organs:							
Malignant Tumors							
		12/50 (24%)			19/50 (38%)		
Overall Incidence	Total	12/50 (24%)	Mean 24%	SD 0%	Total	19/50 (38%)	Mean 38% SD 0%
.....							
#All Organs:							
Malignant and Benign Tumors							
		33/50 (66%)			46/50 (92%)		
Overall Incidence	Total	33/50 (66%)	Mean 66%	SD 0%	Total	46/50 (92%)	Mean 92% SD 0%
.....							
#All Organs:							
Hemangioma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma							
		1/50 (2%)			1/50 (2%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		1/50 (2%)			1/50 (2%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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 Report Date: 02/17/2020

		Male			Female		
#All Organs:							
Histiocytic Sarcoma							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
.....							
#All Organs:							
Leukemia: Granulocytic							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Malignant Schwannoma							
		2/50	(4%)		2/50	(4%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	2/50 (4%)
							Mean 4%
							SD 0%
.....							
#All Organs:							
Mesothelioma: Benign, Malignant, NOS							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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 Report Date: 02/17/2020

		Male			Female		
#All Organs:							
Mesothelioma: Malignant							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Osteosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Osteosarcoma or Osteoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Adrenal Cortex:							
Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Adrenal Cortex:							
Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Adrenal Medulla:							
Ganglioneuroma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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 Report Date: 02/17/2020

		Male			Female		
*Adrenal Medulla:							
Pheochromocytoma Benign							
		5/50 (10%)			0/50 (0%)		
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma Complex							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma Malignant							
		2/50 (4%)			0/50 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma: Benign, Complex, Malignant, NOS							
		8/50 (16%)			0/50 (0%)		
Overall Incidence	Total	8/50 (16%)	Mean 16%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Bone:							
Osteosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Bone:							
Osteosarcoma or Osteoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
Contract/Lab: All Laboratories
Species: RATS
Strain: Harlan Sprague-Dawley
Length of Study: CHRONIC

Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
Route: GAVAGE
Vehicle: CORN OIL

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	Male	Female
*Brain: Glioma Malignant		
Overall Incidence		
.....		
*Brain: Granular Cell Tumor Benign		
Overall Incidence		
.....		
*Brain: Granular Cell Tumor Malignant		
Overall Incidence		
.....		
*Brain: Meningioma Benign		
Overall Incidence		
.....		
*Brain: Meningioma Malignant		
Overall Incidence		
.....		
*Brain: Meningioma: Benign, Malignant, NOS		
Overall Incidence		
.....		

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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	Male				Female			
*Brain:								
Oligodendroglioma, Glioma, or Astrocytoma								
Overall Incidence								
.....								
*Brain:								
Schwannoma Malignant								
Overall Incidence								
.....								
*Clitoral/Preputial Gland:								
Adenoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland:								
Carcinoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland:								
Carcinoma or Adenoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland:								
Squamous Cell Carcinoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male				Female			
*Clitoral/Preputial Gland:									
Squamous Cell Papilloma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
*Epididymis:									
Sarcoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
#Eye:									
Leiomyoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
*Heart:									
Schwannoma Malignant									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
#Intestine Large: Colon/Rectum:									
Granular Cell Tumor Benign									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
#Intestine Large: Colon/Rectum:									
Leiomyoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male			Female		
#Intestine Small: Jejunum: Carcinoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Small: Jejunum: Leiomyosarcoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Small: Site Unspecified: Carcinoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Small: Site Unspecified: Carcinoma or Adenoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Small: Site Unspecified: Leiomyosarcoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Islets, Pancreatic: Adenoma							
		2/50	(4%)			0/50	(0%)
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
.....							

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male			Female		
*Islets, Pancreatic:							
 Carcinoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Islets, Pancreatic:							
 Carcinoma or Adenoma							
		2/50	(4%)			0/50	(0%)
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
.....							
*Kidney: Pelvis and Transitional Epithelium:							
 Papilloma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Kidney: Renal Tubule:							
 Adenoma							
		1/50	(2%)			0/50	(0%)
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
.....							
*Kidney: Renal Tubule:							
 Carcinoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Kidney: Renal Tubule:							
 Carcinoma or Adenoma							
		1/50	(2%)			0/50	(0%)
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
.....							

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male				Female			
*Kidney: Renal Tubule: Lipoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Liposarcoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Nephroblastoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Oncocytoma Benign									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Polyp Adenomatous									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
#Lacrimal Gland: Carcinoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male			Female		
*Liver:							
Cholangiocarcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Liver:							
Cholangioma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Liver:							
Hemangioma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Liver:							
Hepatocellular Adenoma							
		1/50	(2%)		2/50	(4%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	2/50 (4%)
.....							
*Liver:							
Hepatocellular Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Liver:							
Hepatocellular Carcinoma or Hepatoblastoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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	Male				Female			
*Liver:								
Hepatocellular Carcinoma or Hepatocellular Adenoma								
		1/50	(2%)			2/50	(4%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	2/50	(4%)
							Mean 4%	SD 0%
.....								
*Liver:								
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma								
		1/50	(2%)			2/50	(4%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	2/50	(4%)
							Mean 4%	SD 0%
.....								
*Lung:								
Alveolar/Bronchiolar Adenoma								
		0/49	(0%)			1/50	(2%)	
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma								
		0/49	(0%)			0/50	(0%)	
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma								
		0/49	(0%)			1/50	(2%)	
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
.....								
*Lung:								
Sarcoma								
		0/49	(0%)			1/50	(2%)	
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male			Female		
*Lung:							
Squamous Cell Carcinoma							
		0/49 (0%)			0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Lymph Node, Mesenteric:							
Hemangiosarcoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Mammary Gland:							
Adenolipoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Mammary Gland:							
Adenoma							
		0/50 (0%)			3/50 (6%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	3/50 (6%)	Mean 6% SD 0%
.....							
#Mammary Gland:							
Carcinoma							
		0/50 (0%)			3/50 (6%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	3/50 (6%)	Mean 6% SD 0%
.....							
#Mammary Gland:							
Carcinoma or Adenoma							
		0/50 (0%)			6/50 (12%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	6/50 (12%)	Mean 12% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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	Male				Female			
#Mammary Gland:								
Fibroadenoma								
		1/50	(2%)			29/50	(58%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	29/50 (58%)	Mean 58% SD 0%
.....								
#Mammary Gland:								
Fibroma, Fibroadenoma or Adenoma								
		1/50	(2%)			30/50	(60%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	30/50 (60%)	Mean 60% SD 0%
.....								
#Mammary Gland:								
Fibroma, Fibroadenoma, Carcinoma, or Adenoma								
		1/50	(2%)			32/50	(64%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	32/50 (64%)	Mean 64% SD 0%
.....								
#Mammary Gland:								
Myoepithelioma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....								
*Nose:								
Carcinoma								
		0/50	(0%)			0/49	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....								
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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	Male				Female			
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Oral Mucosa:								
Squamous Cell Carcinoma								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Ovary:								
Cystadenoma								
					0/50 (0%)			
Overall Incidence	Total				0/50 (0%)	Mean 0%	SD 0%	
.....								
*Ovary:								
Granulosa Cell Tumor Benign								
					0/50 (0%)			
Overall Incidence	Total				0/50 (0%)	Mean 0%	SD 0%	
.....								
*Ovary:								
Granulosa Cell Tumor Malignant								
					0/50 (0%)			
Overall Incidence	Total				0/50 (0%)	Mean 0%	SD 0%	
.....								
*Ovary:								
Granulosa Cell Tumor: Benign, Malignant, NOS								
					0/50 (0%)			
Overall Incidence	Total				0/50 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
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 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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	Male		Female	
*Ovary:				
Granulosa-Theca Tumor Benign				
		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2% SD 0%
.....				
*Ovary:				
Granulosa-Theca Tumor Malignant				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Luteoma				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Schwannoma Malignant				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Sertoli Cell Tumor Benign				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Thecoma Benign				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				

*: Denominator is number of animals with tissues examined microscopically

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Version: Nov2019
 Contract/Lab: All Laboratories
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		Male			Female		
*Ovary:							
Tubulostromal Carcinoma							
					1/50 (2%)		
Overall Incidence					Total 1/50 (2%)	Mean 2%	SD 0%
.....							
*Pancreas:							
Adenoma							
		5/50 (10%)			0/50 (0%)		
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total 0/50 (0%)	Mean 0%	SD 0%
.....							
*Pancreas:							
Carcinoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total 0/50 (0%)	Mean 0%	SD 0%
.....							
*Pancreas:							
Carcinoma or Adenoma							
		5/50 (10%)			0/50 (0%)		
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total 0/50 (0%)	Mean 0%	SD 0%
.....							
*Parathyroid Gland:							
Adenoma							
		0/43 (0%)			0/47 (0%)		
Overall Incidence	Total	0/43 (0%)	Mean 0%	SD 0%	Total 0/47 (0%)	Mean 0%	SD 0%
.....							
#Peripheral Nerve:							
Paraganglioma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total 0/50 (0%)	Mean 0%	SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
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		Male			Female		
#Peripheral Nerve:							
Schwannoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
#Peripheral Nerve:							
Schwannoma: Benign, Malignant, NOS							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Adenoma							
		5/50	(10%)		18/50	(36%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	18/50 (36%)
							Mean 36%
							SD 0%
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Carcinoma or Adenoma							
		5/50	(10%)		18/50	(36%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	18/50 (36%)
							Mean 36%
							SD 0%
*Pituitary Gland: Pars Intermedia:							
Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
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 Tumor Incidence for Selected Control Animal Groups
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		Male				Female			
*Pituitary Gland: Pars Intermedia:									
Carcinoma or Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Pituitary Gland: Pars Nervosa:									
Schwannoma Malignant									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Prostate:									
Adenoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
*Prostate:									
Carcinoma or Adenoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
*Salivary Glands:									
Schwannoma Malignant									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Seminal Vesicle:									
Hemangiosarcoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				

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	Male				Female			
#Skeletal Muscle:								
Hemangioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skeletal Muscle:								
Liposarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skeletal Muscle:								
Sarcoma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Basal Cell Adenoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
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	Male				Female			
#Skin:								
Basal Cell Carcinoma								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma								
		6/50 (12%)			0/50 (0%)			
Overall Incidence	Total	6/50 (12%)	Mean 12%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Fibroma								
		5/50 (10%)			1/50 (2%)			
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma								
		7/50 (14%)			2/50 (4%)			
Overall Incidence	Total	7/50 (14%)	Mean 14%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
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 Strain: Harlan Sprague-Dawley
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 Tumor Incidence for Selected Control Animal Groups
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	Male				Female			
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		7/50 (14%)			2/50 (4%)			
Overall Incidence	Total	7/50 (14%)	Mean 14%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
.....								
#Skin:								
Fibrosarcoma								
		1/50 (2%)			1/50 (2%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		2/50 (4%)			1/50 (2%)			
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Hemangioma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangiopericytoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangiosarcoma								
		0/50 (0%)			1/50 (2%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
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 Strain: Harlan Sprague-Dawley
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		Male			Female		
#Skin:							
Keratoacanthoma							
		4/50	(8%)		0/50	(0%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#Skin:							
Lipoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#Skin:							
Liposarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#Skin:							
Malignant Fibrous Histiocytoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#Skin:							
Neurofibrosarcoma or Schwannoma (malignant or NOS)							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
.....							
#Skin:							
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
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 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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		Male				Female			
#Skin:									
Osteosarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
#Skin:									
Pilomatrixoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
#Skin:									
Sarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
#Skin:									
Schwannoma Malignant									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	1/50	(2%)	Mean 2%	SD 0%
.....									
#Skin:									
Squamous Cell Carcinoma									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
#Skin:									
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma									
		2/50	(4%)			0/50	(0%)		
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	0/50	(0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

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	Male				Female			
#Skin:								
Squamous Cell Papilloma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Squamous Cell Papilloma or Papilloma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma								
		5/50	(10%)			0/50	(0%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma								
		5/50	(10%)			0/50	(0%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Trichoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Skin: Sebaceous Gland:								
Adenoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

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		Male			Female		
#Skin: Sebaceous Gland:							
Carcinoma or Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
#Spinal Cord:							
Astrocytoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
*Spleen:							
Hemangiosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
#Stomach, Forestomach:							
Sarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
#Stomach, Forestomach:							
Squamous Cell Carcinoma							
		1/50	(2%)		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
#Stomach, Forestomach:							
Squamous Cell Carcinoma or Papilloma Squamous							
		1/50	(2%)		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

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Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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 Report Date: 02/17/2020

	Male				Female			
#Stomach, Forestomach:								
Squamous Cell Papilloma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
*Testis:								
Adenoma								
		3/49	(6%)					
Overall Incidence	Total	3/49	(6.12%)	Mean 6.12%	SD 0%			
.....								
*Thymus:								
Thymoma Benign								
		1/46	(2%)			0/47	(0%)	
Overall Incidence	Total	1/46	(2.17%)	Mean 2.17%	SD 0%	Total	0/47	(0%)
								Mean 0%
								SD 0%
.....								
*Thymus:								
Thymoma Malignant								
		0/46	(0%)			0/47	(0%)	
Overall Incidence	Total	0/46	(0%)	Mean 0%	SD 0%	Total	0/47	(0%)
								Mean 0%
								SD 0%
.....								
*Thymus:								
Thymoma: Benign, Malignant, NOS								
		1/46	(2%)			0/47	(0%)	
Overall Incidence	Total	1/46	(2.17%)	Mean 2.17%	SD 0%	Total	0/47	(0%)
								Mean 0%
								SD 0%
.....								
*Thyroid Gland: C-Cell:								
Adenoma								
		13/50	(26%)			11/49	(22%)	
Overall Incidence	Total	13/50	(26%)	Mean 26%	SD 0%	Total	11/49	(22.45%)
								Mean 22.45%
								SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

Page: 32
 Report Date: 02/17/2020

		Male			Female		
*Thyroid Gland: C-Cell: Carcinoma							
		0/50 (0%)			0/49 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
*Thyroid Gland: C-Cell: Carcinoma or Adenoma							
		13/50 (26%)			11/49 (22%)		
Overall Incidence	Total	13/50 (26%)	Mean 26%	SD 0%	Total	11/49 (22.45%)	Mean 22.45% SD 0%
*Thyroid Gland: Follicular Cell: Adenoma							
		0/50 (0%)			0/49 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
*Thyroid Gland: Follicular Cell: Carcinoma							
		0/50 (0%)			0/49 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma							
		0/50 (0%)			0/49 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
#Tissue NOS: Schwannoma Malignant							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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	Male				Female			
#Tongue:								
Squamous Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Tongue:								
Squamous Cell Carcinoma or Papilloma Squamous								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Tooth:								
Odontoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
*Urinary Bladder:								
Leiomyosarcoma								
		0/50	(0%)			0/49	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....								
#Uterus:								
Adenocarcinoma								
						5/50	(10%)	
Overall Incidence						Total	5/50 (10%)	Mean 10% SD 0%
.....								
#Uterus:								
Adenocarcinoma or Adenoma								
						5/50	(10%)	
Overall Incidence						Total	5/50 (10%)	Mean 10% SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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	Male		Female	
#Uterus:				
Adenoma				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Deciduoma Benign				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Granular Cell Tumor Benign				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Polyp Stromal				
		10/50 (20%)		
Overall Incidence	Total	10/50 (20%)	Mean 20%	SD 0%
.....				
#Uterus:				
Sarcoma				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Sarcoma Stromal				
		2/50 (4%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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	Male	Female
#Uterus:		
Sarcoma Stromal or Polyp Stromal		
Overall Incidence	Total 12/50 (24%)	Mean 24% SD 0%
#Uterus:		
Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Uterus:		
Squamous Cell Carcinoma		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Vagina:		
Granular Cell Tumor Benign		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Vagina:		
Polyp		
Overall Incidence	Total 1/50 (2%)	Mean 2% SD 0%
#Vagina:		
Schwannoma Malignant		
Overall Incidence	Total 1/50 (2%)	Mean 2% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
Contract/Lab: All Laboratories
Species: RATS
Strain: Harlan Sprague-Dawley
Length of Study: CHRONIC

Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
Route: GAVAGE
Vehicle: CORN OIL

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	Male				Female			
#Zymbal's Gland:								
Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
#Zymbal's Gland:								
Carcinoma or Adenoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
Contract/Lab: All Laboratories
Species: RATS
Strain: Harlan Sprague-Dawley
Length of Study: CHRONIC

Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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Report Date: 02/17/2020

Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
Battelle Northwest	051047203	01/17/11	729	50(5)	25(661)	609.4	p-Chloro-a,a,a-trifluorotoluene
Female							
Battelle Northwest	051047203	01/17/11	731	50(5)	22(626)	377.3	p-Chloro-a,a,a-trifluorotoluene

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male			Female		
#All Organs:							
Benign Tumors							
		30/50 (60%)			39/50 (78%)		
Overall Incidence	Total	30/50 (60%)	Mean 60%	SD 0%	Total	39/50 (78%)	Mean 78% SD 0%
.....							
#All Organs:							
Malignant Tumors							
		12/50 (24%)			11/50 (22%)		
Overall Incidence	Total	12/50 (24%)	Mean 24%	SD 0%	Total	11/50 (22%)	Mean 22% SD 0%
.....							
#All Organs:							
Malignant and Benign Tumors							
		37/50 (74%)			41/50 (82%)		
Overall Incidence	Total	37/50 (74%)	Mean 74%	SD 0%	Total	41/50 (82%)	Mean 82% SD 0%
.....							
#All Organs:							
Hemangioma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male			Female		
#All Organs:							
Histiocytic Sarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#All Organs:							
Leukemia: Granulocytic							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#All Organs:							
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated							
		3/50	(6%)		0/50	(0%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#All Organs:							
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#All Organs:							
Malignant Schwannoma							
		0/50	(0%)		2/50	(4%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50 (4%)
						Mean 4%	SD 0%
.....							
#All Organs:							
Mesothelioma: Benign, Malignant, NOS							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male			Female				
#All Organs:									
Mesothelioma: Malignant									
		1/50	(2%)		0/50	(0%)			
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
#All Organs:									
Osteosarcoma									
		0/50	(0%)		0/50	(0%)			
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
#All Organs:									
Osteosarcoma or Osteoma									
		0/50	(0%)		0/50	(0%)			
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Adrenal Cortex:									
Adenoma									
		3/50	(6%)		0/50	(0%)			
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Adrenal Cortex:									
Carcinoma									
		0/50	(0%)		0/50	(0%)			
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Adrenal Medulla:									
Ganglioneuroma									
		0/50	(0%)		0/49	(0%)			
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male			Female		
*Adrenal Medulla:							
Pheochromocytoma Benign							
		12/50 (24%)			0/49 (0%)		
Overall Incidence	Total	12/50 (24%)	Mean 24%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma Complex							
		0/50 (0%)			0/49 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma Malignant							
		2/50 (4%)			0/49 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma: Benign, Complex, Malignant, NOS							
		14/50 (28%)			0/49 (0%)		
Overall Incidence	Total	14/50 (28%)	Mean 28%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
#Bone:							
Osteosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Bone:							
Osteosarcoma or Osteoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male			Female				
*Brain:									
 Glioma Malignant									
		2/50	(4%)		1/50	(2%)			
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....									
*Brain:									
 Granular Cell Tumor Benign									
		0/50	(0%)		0/50	(0%)			
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Brain:									
 Granular Cell Tumor Malignant									
		0/50	(0%)		0/50	(0%)			
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Brain:									
 Meningioma Benign									
		0/50	(0%)		0/50	(0%)			
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Brain:									
 Meningioma Malignant									
		0/50	(0%)		0/50	(0%)			
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Brain:									
 Meningioma: Benign, Malignant, NOS									
		0/50	(0%)		0/50	(0%)			
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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		Male			Female		
*Brain:							
 Oligodendroglioma, Glioma, or Astrocytoma							
		2/50	(4%)		1/50	(2%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
.....							
*Brain:							
 Schwannoma Malignant							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
.....							
*Clitoral/Preputial Gland:							
 Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Clitoral/Preputial Gland:							
 Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Clitoral/Preputial Gland:							
 Carcinoma or Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Clitoral/Preputial Gland:							
 Squamous Cell Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male			Female		
*Clitoral/Preputial Gland:							
Squamous Cell Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Epididymis:							
Sarcoma							
		1/50	(2%)				
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%		
.....							
#Eye:							
Leiomyoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Heart:							
Schwannoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Intestine Large: Colon/Rectum:							
Granular Cell Tumor Benign							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Intestine Large: Colon/Rectum:							
Leiomyoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male			Female		
#Intestine Small: Jejunum: Carcinoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Jejunum: Leiomyosarcoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Site Unspecified: Carcinoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Site Unspecified: Carcinoma or Adenoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Site Unspecified: Leiomyosarcoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Islets, Pancreatic: Adenoma							
		8/50 (16%)			1/50 (2%)		
Overall Incidence	Total	8/50 (16%)	Mean 16%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
*: Denominator is number of animals with tissues examined microscopically							
#: Denominator is number of animals necropsied							

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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		Male			Female		
*Islets, Pancreatic:							
 Carcinoma							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
.....							
*Islets, Pancreatic:							
 Carcinoma or Adenoma							
		8/50	(16%)		2/50	(4%)	
Overall Incidence	Total	8/50	(16%)	Mean 16%	SD 0%	Total	2/50 (4%)
						Mean 4%	SD 0%
.....							
*Kidney: Pelvis and Transitional Epithelium:							
 Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Kidney: Renal Tubule:							
 Adenoma							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
.....							
*Kidney: Renal Tubule:							
 Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Kidney: Renal Tubule:							
 Carcinoma or Adenoma							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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		Male				Female			
*Kidney: Renal Tubule: Lipoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Liposarcoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Nephroblastoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Oncocytoma Benign									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Polyp Adenomatous									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
#Lacrimal Gland: Carcinoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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		Male				Female			
*Liver:									
Cholangiocarcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Cholangioma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hemangioma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hepatocellular Adenoma									
		0/50	(0%)			2/50	(4%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)	Mean 4% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatoblastoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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		Male				Female			
*Liver:									
Hepatocellular Carcinoma or Hepatocellular Adenoma									
		0/50	(0%)			2/50	(4%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)	Mean 4% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma									
		0/50	(0%)			2/50	(4%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)	Mean 4% SD 0%
.....									
*Lung:									
Alveolar/Bronchiolar Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Lung:									
Sarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: INHALATION
 Vehicle: AIR

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		Male				Female			
*Lung:									
Squamous Cell Carcinoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
#Lymph Node, Mesenteric:									
Hemangiosarcoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland:									
Adenolipoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland:									
Adenoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	4/50 (8%)	Mean 8%	SD 0%	
.....									
#Mammary Gland:									
Carcinoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	5/50 (10%)	Mean 10%	SD 0%	
.....									
#Mammary Gland:									
Carcinoma or Adenoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	9/50 (18%)	Mean 18%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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	Male				Female			
#Mammary Gland:								
Fibroadenoma								
		2/50	(4%)			20/50	(40%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	20/50 (40%)	Mean 40% SD 0%
.....								
#Mammary Gland:								
Fibroma, Fibroadenoma or Adenoma								
		2/50	(4%)			23/50	(46%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	23/50 (46%)	Mean 46% SD 0%
.....								
#Mammary Gland:								
Fibroma, Fibroadenoma, Carcinoma, or Adenoma								
		2/50	(4%)			27/50	(54%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	27/50 (54%)	Mean 54% SD 0%
.....								
#Mammary Gland:								
Myoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
*Nose:								
Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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	Male				Female			
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Oral Mucosa:								
Squamous Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
*Ovary:								
Cystadenoma								
						0/50	(0%)	
Overall Incidence						Total	0/50 (0%)	Mean 0% SD 0%
.....								
*Ovary:								
Granulosa Cell Tumor Benign								
						3/50	(6%)	
Overall Incidence						Total	3/50 (6%)	Mean 6% SD 0%
.....								
*Ovary:								
Granulosa Cell Tumor Malignant								
						0/50	(0%)	
Overall Incidence						Total	0/50 (0%)	Mean 0% SD 0%
.....								
*Ovary:								
Granulosa Cell Tumor: Benign, Malignant, NOS								
						3/50	(6%)	
Overall Incidence						Total	3/50 (6%)	Mean 6% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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	Male			Female
*Ovary:				
Granulosa-Theca Tumor Benign				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Granulosa-Theca Tumor Malignant				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Luteoma				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Schwannoma Malignant				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Sertoli Cell Tumor Benign				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Thecoma Benign				
		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2% SD 0%
.....				

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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Male					Female			
*Ovary:								
Tubulostromal Carcinoma								
					0/50	(0%)		
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Adenoma								
					0/50	(0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Carcinoma								
					0/50	(0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Carcinoma or Adenoma								
					0/50	(0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Parathyroid Gland:								
Adenoma								
					0/48	(0%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/45 (0%)	Mean 0%	SD 0%
.....								
#Peripheral Nerve:								
Paraganglioma								
					0/50	(0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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	Male				Female			
#Peripheral Nerve:								
Schwannoma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Peripheral Nerve:								
Schwannoma: Benign, Malignant, NOS								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Adenoma								
		11/50	(22%)			18/50	(36%)	
Overall Incidence	Total	11/50	(22%)	Mean 22%	SD 0%	Total	18/50	(36%)
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma or Adenoma								
		11/50	(22%)			18/50	(36%)	
Overall Incidence	Total	11/50	(22%)	Mean 22%	SD 0%	Total	18/50	(36%)
.....								
*Pituitary Gland: Pars Intermedia:								
Adenoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

Male					Female				
*Pituitary Gland: Pars Intermedia:									
Carcinoma or Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Pituitary Gland: Pars Nervosa:									
Schwannoma Malignant									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Prostate:									
Adenoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
*Prostate:									
Carcinoma or Adenoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
*Salivary Glands:									
Schwannoma Malignant									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Seminal Vesicle:									
Hemangiosarcoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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	Male				Female			
#Skeletal Muscle:								
Hemangioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skeletal Muscle:								
Liposarcoma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
#Skeletal Muscle:								
Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: INHALATION
 Vehicle: AIR

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	Male				Female			
#Skin:								
Basal Cell Carcinoma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
.....								
#Skin:								
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
.....								
#Skin:								
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
.....								
#Skin:								
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma								
		4/50	(8%)			1/50	(2%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
.....								
#Skin:								
Fibroma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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	Male				Female			
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Fibrosarcoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangioma								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangiopericytoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangiosarcoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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	Male				Female			
#Skin:								
Keratoacanthoma								
		3/50	(6%)			0/50	(0%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Lipoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Liposarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Malignant Fibrous Histiocytoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Neurofibrosarcoma or Schwannoma (malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: INHALATION
 Vehicle: AIR

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 Report Date: 02/17/2020

		Male				Female			
#Skin:									
Osteosarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Pilomatrixoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Sarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Schwannoma Malignant									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Squamous Cell Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male			Female		
#Skin:							
Squamous Cell Papilloma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Skin:							
Squamous Cell Papilloma or Papilloma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Skin:							
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma							
		4/50 (8%)			0/50 (0%)		
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Skin:							
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma							
		4/50 (8%)			0/50 (0%)		
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Skin:							
Trichoepithelioma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Skin: Sebaceous Gland:							
Adenoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male			Female		
#Skin: Sebaceous Gland:							
Carcinoma or Adenoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Spinal Cord:							
Astrocytoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Spleen:							
Hemangiosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Stomach, Forestomach:							
Sarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Stomach, Forestomach:							
Squamous Cell Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Stomach, Forestomach:							
Squamous Cell Carcinoma or Papilloma Squamous							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male				Female			
#Stomach, Forestomach:									
Squamous Cell Papilloma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Testis:									
Adenoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
*Thymus:									
Thymoma Benign									
		0/48	(0%)			0/50	(0%)		
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Thymus:									
Thymoma Malignant									
		0/48	(0%)			0/50	(0%)		
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Thymus:									
Thymoma: Benign, Malignant, NOS									
		0/48	(0%)			0/50	(0%)		
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Thyroid Gland: C-Cell:									
Adenoma									
		2/50	(4%)			2/50	(4%)		
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	2/50	(4%)	Mean 4% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male			Female		
*Thyroid Gland: C-Cell: Carcinoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: C-Cell: Carcinoma or Adenoma							
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	2/50 (4%)	Mean 4% SD 0%
.....							
*Thyroid Gland: Follicular Cell: Adenoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: Follicular Cell: Carcinoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Tissue NOS: Schwannoma Malignant							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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 Report Date: 02/17/2020

		Male			Female		
#Tongue:							
Squamous Cell Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Tongue:							
Squamous Cell Carcinoma or Papilloma Squamous							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Tooth:							
Odontoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Urinary Bladder:							
Leiomyosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Uterus:							
Adenocarcinoma							
Overall Incidence							
.....							
#Uterus:							
Adenocarcinoma or Adenoma							
Overall Incidence							
.....							

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
Contract/Lab: All Laboratories
Species: RATS
Strain: Harlan Sprague-Dawley
Length of Study: CHRONIC

Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

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Report Date: 02/17/2020

	Male	Female
#Uterus: Adenoma		
Overall Incidence		
.....		
#Uterus: Deciduoma Benign		
Overall Incidence		
.....		
#Uterus: Granular Cell Tumor Benign		
Overall Incidence		
.....		
#Uterus: Polyp Stromal		
Overall Incidence		
.....		
#Uterus: Sarcoma		
Overall Incidence		
.....		
#Uterus: Sarcoma Stromal		
Overall Incidence		
.....		

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: INHALATION
 Vehicle: AIR

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 Report Date: 02/17/2020

	Male	Female
#Uterus:		
Sarcoma Stromal or Polyp Stromal		
Overall Incidence		
.....		
#Uterus:		
Schwannoma Malignant		
Overall Incidence		
.....		
#Uterus:		
Squamous Cell Carcinoma		
Overall Incidence		
.....		
#Vagina:		
Granular Cell Tumor Benign		
Overall Incidence	Total	1/50 (2%) Mean 2% SD 0%
.....		
#Vagina:		
Polyp		
Overall Incidence	Total	0/50 (0%) Mean 0% SD 0%
.....		
#Vagina:		
Schwannoma Malignant		
Overall Incidence	Total	1/50 (2%) Mean 2% SD 0%
.....		

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: INHALATION
 Vehicle: AIR

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 Report Date: 02/17/2020

		Male				Female			
#Zymbal's Gland:									
Carcinoma									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Zymbal's Gland:									
Carcinoma or Adenoma									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
Contract/Lab: All Laboratories
Species: RATS
Strain: Harlan Sprague-Dawley
Length of Study: CHRONIC

Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

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Report Date: 02/17/2020

Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
Battelle Columbus Laboratory	051018801	02/17/11	733	50(2)	32(675)	525.8	Di(2-ethylhexyl) Phthalate
Female							
Battelle Columbus Laboratory	051018801	02/18/11	736	50(4)	33(691)	329.5	Di(2-ethylhexyl) Phthalate

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

		Male			Female		
#All Organs:							
Benign Tumors							
		27/50 (54%)			37/50 (74%)		
Overall Incidence	Total	27/50 (54%)	Mean 54%	SD 0%	Total	37/50 (74%)	Mean 74% SD 0%
.....							
#All Organs:							
Malignant Tumors							
		13/50 (26%)			16/50 (32%)		
Overall Incidence	Total	13/50 (26%)	Mean 26%	SD 0%	Total	16/50 (32%)	Mean 32% SD 0%
.....							
#All Organs:							
Malignant and Benign Tumors							
		32/50 (64%)			41/50 (82%)		
Overall Incidence	Total	32/50 (64%)	Mean 64%	SD 0%	Total	41/50 (82%)	Mean 82% SD 0%
.....							
#All Organs:							
Hemangioma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

Page: 72
 Report Date: 02/17/2020

		Male			Female		
#All Organs:							
Histiocytic Sarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Leukemia: Granulocytic							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type							
		2/50	(4%)		1/50	(2%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
.....							
#All Organs:							
Malignant Schwannoma							
		3/50	(6%)		1/50	(2%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
.....							
#All Organs:							
Mesothelioma: Benign, Malignant, NOS							
		2/50	(4%)		0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

	Male				Female			
#All Organs:								
Mesothelioma: Malignant								
		2/50	(4%)			0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
#All Organs:								
Osteosarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
#All Organs:								
Osteosarcoma or Osteoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
*Adrenal Cortex:								
Adenoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
*Adrenal Cortex:								
Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
*Adrenal Medulla:								
Ganglioneuroma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

	Male				Female			
*Adrenal Medulla:								
Pheochromocytoma Benign								
		4/50	(8%)			1/50	(2%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
*Adrenal Medulla:								
Pheochromocytoma Complex								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
*Adrenal Medulla:								
Pheochromocytoma Malignant								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
*Adrenal Medulla:								
Pheochromocytoma: Benign, Complex, Malignant, NOS								
		5/50	(10%)			1/50	(2%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
#Bone:								
Osteosarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
#Bone:								
Osteosarcoma or Osteoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

		Male			Female		
*Brain:							
 Glioma Malignant							
		4/50	(8%)		0/50	(0%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Granular Cell Tumor Benign							
		3/50	(6%)		2/50	(4%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	2/50 (4%)
							Mean 4%
							SD 0%
.....							
*Brain:							
 Granular Cell Tumor Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma Benign							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma: Benign, Malignant, NOS							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

	Male				Female			
*Brain:								
Oligodendroglioma, Glioma, or Astrocytoma								
		4/50	(8%)			0/50	(0%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
*Brain:								
Schwannoma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland:								
Adenoma								
		0/49	(0%)			0/49	(0%)	
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)
							Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland:								
Carcinoma								
		1/49	(2%)			0/49	(0%)	
Overall Incidence	Total	1/49	(2.04%)	Mean 2.04%	SD 0%	Total	0/49	(0%)
							Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland:								
Carcinoma or Adenoma								
		1/49	(2%)			0/49	(0%)	
Overall Incidence	Total	1/49	(2.04%)	Mean 2.04%	SD 0%	Total	0/49	(0%)
							Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland:								
Squamous Cell Carcinoma								
		0/49	(0%)			0/49	(0%)	
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

		Male				Female			
*Clitoral/Preputial Gland:									
Squamous Cell Papilloma									
		0/49	(0%)			1/49	(2%)		
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	1/49 (2.04%)	Mean 2.04%	SD 0%
.....									
*Epididymis:									
Sarcoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
#Eye:									
Leiomyoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Heart:									
Schwannoma Malignant									
		3/50	(6%)			1/50	(2%)		
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....									
#Intestine Large: Colon/Rectum:									
Granular Cell Tumor Benign									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
#Intestine Large: Colon/Rectum:									
Leiomyoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*: Denominator is number of animals with tissues examined microscopically									
#: Denominator is number of animals necropsied									

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

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 Report Date: 02/17/2020

		Male			Female		
#Intestine Small: Jejunum: Carcinoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Jejunum: Leiomyosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Site Unspecified: Carcinoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Site Unspecified: Carcinoma or Adenoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Site Unspecified: Leiomyosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Islets, Pancreatic: Adenoma							
		3/49 (6%)			1/50 (2%)		
Overall Incidence	Total	3/49 (6.12%)	Mean 6.12%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

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 Report Date: 02/17/2020

		Male			Female		
*Islets, Pancreatic:							
 Carcinoma							
		0/49	(0%)		0/50	(0%)	
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Islets, Pancreatic:							
 Carcinoma or Adenoma							
		3/49	(6%)		1/50	(2%)	
Overall Incidence	Total	3/49	(6.12%)	Mean 6.12%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
.....							
*Kidney: Pelvis and Transitional Epithelium:							
 Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Kidney: Renal Tubule:							
 Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Kidney: Renal Tubule:							
 Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Kidney: Renal Tubule:							
 Carcinoma or Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

		Male				Female			
*Kidney: Renal Tubule: Lipoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Liposarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Nephroblastoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Oncocytoma Benign									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Polyp Adenomatous									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Lacrimal Gland: Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

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 Report Date: 02/17/2020

		Male				Female			
*Liver:									
Cholangiocarcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Cholangioma									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
*Liver:									
Hemangioma									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hepatocellular Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatoblastoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

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	Male				Female			
*Liver:								
Hepatocellular Carcinoma or Hepatocellular Adenoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Liver:								
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Lung:								
Alveolar/Bronchiolar Adenoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Lung:								
Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

		Male				Female			
*Lung:									
Squamous Cell Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
#Lymph Node, Mesenteric:									
Hemangiosarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
#Mammary Gland:									
Adenolipoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
#Mammary Gland:									
Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
#Mammary Gland:									
Carcinoma									
		0/50	(0%)			8/50	(16%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	8/50	(16%)	Mean 16%	SD 0%
.....									
#Mammary Gland:									
Carcinoma or Adenoma									
		0/50	(0%)			8/50	(16%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	8/50	(16%)	Mean 16%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

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 Report Date: 02/17/2020

	Male				Female				
#Mammary Gland:									
Fibroadenoma									
		0/50	(0%)			25/50	(50%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	25/50 (50%)	Mean 50%	SD 0%
.....									
#Mammary Gland:									
Fibroma, Fibroadenoma or Adenoma									
		0/50	(0%)			25/50	(50%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	25/50 (50%)	Mean 50%	SD 0%
.....									
#Mammary Gland:									
Fibroma, Fibroadenoma, Carcinoma, or Adenoma									
		0/50	(0%)			29/50	(58%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	29/50 (58%)	Mean 58%	SD 0%
.....									
#Mammary Gland:									
Myoepithelioma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Nose:									
Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

	Male				Female			
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva): Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Oral Mucosa: Squamous Cell Carcinoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Ovary: Cystadenoma								
					0/50 (0%)			
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Ovary: Granulosa Cell Tumor Benign								
					1/50 (2%)			
Overall Incidence					Total	1/50 (2%)	Mean 2%	SD 0%
.....								
*Ovary: Granulosa Cell Tumor Malignant								
					0/50 (0%)			
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Ovary: Granulosa Cell Tumor: Benign, Malignant, NOS								
					1/50 (2%)			
Overall Incidence					Total	1/50 (2%)	Mean 2%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

	Male		Female	
*Ovary:				
Granulosa-Theca Tumor Benign				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Granulosa-Theca Tumor Malignant				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Luteoma				
		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2% SD 0%
.....				
*Ovary:				
Schwannoma Malignant				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Sertoli Cell Tumor Benign				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Thecoma Benign				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

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 Report Date: 02/17/2020

Male					Female			
*Ovary:								
Tubulostromal Carcinoma								
					0/50	(0%)		
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Adenoma								
					1/49	(2%)		
Overall Incidence	Total	1/49 (2.04%)	Mean 2.04%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Carcinoma								
					0/49	(0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Carcinoma or Adenoma								
					1/49	(2%)		
Overall Incidence	Total	1/49 (2.04%)	Mean 2.04%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Parathyroid Gland:								
Adenoma								
					0/43	(0%)		
Overall Incidence	Total	0/43 (0%)	Mean 0%	SD 0%	Total	0/42 (0%)	Mean 0%	SD 0%
.....								
#Peripheral Nerve:								
Paraganglioma								
					0/50	(0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

	Male				Female			
#Peripheral Nerve:								
Schwannoma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Peripheral Nerve:								
Schwannoma: Benign, Malignant, NOS								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Adenoma								
		3/50	(6%)			13/49	(27%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	13/49	(26.53%)
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma								
		0/50	(0%)			0/49	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma or Adenoma								
		3/50	(6%)			13/49	(27%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	13/49	(26.53%)
.....								
*Pituitary Gland: Pars Intermedia:								
Adenoma								
		1/50	(2%)			0/49	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/49	(0%)

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

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	Male				Female			
*Pituitary Gland: Pars Intermedia:								
 Carcinoma or Adenoma								
		1/50	(2%)			0/49	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....								
*Pituitary Gland: Pars Nervosa:								
 Schwannoma Malignant								
		0/50	(0%)			0/49	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....								
*Prostate:								
 Adenoma								
		1/50	(2%)					
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%			
.....								
*Prostate:								
 Carcinoma or Adenoma								
		1/50	(2%)					
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%			
.....								
*Salivary Glands:								
 Schwannoma Malignant								
		0/50	(0%)			0/49	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....								
#Seminal Vesicle:								
 Hemangiosarcoma								
		0/50	(0%)					
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%			

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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	Male				Female			
#Skeletal Muscle:								
Hemangioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skeletal Muscle:								
Liposarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skeletal Muscle:								
Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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	Male				Female			
#Skin:								
Basal Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Fibroma								
		3/50	(6%)			0/50	(0%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma								
		3/50	(6%)			1/50	(2%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	1/50	(2%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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	Male				Female			
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		3/50 (6%)			1/50 (2%)			
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Fibrosarcoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		0/50 (0%)			1/50 (2%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Hemangioma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangiopericytoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangiosarcoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

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	Male				Female			
#Skin:								
Keratoacanthoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Lipoma								
		3/50	(6%)			0/50	(0%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Liposarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Malignant Fibrous Histiocytoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Neurofibrosarcoma or Schwannoma (malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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		Male				Female			
#Skin:									
Osteosarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Pilomatrixoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Sarcoma									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
#Skin:									
Schwannoma Malignant									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Squamous Cell Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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		Male			Female		
#Skin:							
Squamous Cell Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#Skin:							
Squamous Cell Papilloma or Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#Skin:							
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#Skin:							
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#Skin:							
Trichoepithelioma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#Skin: Sebaceous Gland:							
Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

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		Male				Female			
#Skin: Sebaceous Gland:									
Carcinoma or Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Spinal Cord:									
Astrocytoma Malignant									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Spleen:									
Hemangiosarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Stomach, Forestomach:									
Sarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Stomach, Forestomach:									
Squamous Cell Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Stomach, Forestomach:									
Squamous Cell Carcinoma or Papilloma Squamous									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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		Male			Female		
#Stomach, Forestomach:							
Squamous Cell Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Testis:							
Adenoma							
		7/50	(14%)				
Overall Incidence	Total	7/50	(14%)	Mean 14%	SD 0%		
.....							
*Thymus:							
Thymoma Benign							
		0/48	(0%)			0/49	(0%)
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)
							Mean 0%
							SD 0%
.....							
*Thymus:							
Thymoma Malignant							
		0/48	(0%)			0/49	(0%)
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)
							Mean 0%
							SD 0%
.....							
*Thymus:							
Thymoma: Benign, Malignant, NOS							
		0/48	(0%)			0/49	(0%)
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)
							Mean 0%
							SD 0%
.....							
*Thyroid Gland: C-Cell:							
Adenoma							
		13/50	(26%)			12/50	(24%)
Overall Incidence	Total	13/50	(26%)	Mean 26%	SD 0%	Total	12/50 (24%)
							Mean 24%
							SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: ORAL
Vehicle: FEED

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		Male			Female		
*Thyroid Gland: C-Cell: Carcinoma							
		2/50 (4%)			2/50 (4%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	2/50 (4%)	Mean 4% SD 0%
*Thyroid Gland: C-Cell: Carcinoma or Adenoma							
		14/50 (28%)			14/50 (28%)		
Overall Incidence	Total	14/50 (28%)	Mean 28%	SD 0%	Total	14/50 (28%)	Mean 28% SD 0%
*Thyroid Gland: Follicular Cell: Adenoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
*Thyroid Gland: Follicular Cell: Carcinoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
#Tissue NOS: Schwannoma Malignant							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

	Male				Female			
#Tongue:								
Squamous Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Tongue:								
Squamous Cell Carcinoma or Papilloma Squamous								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Tooth:								
Odontoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Urinary Bladder:								
Leiomyosarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Uterus:								
Adenocarcinoma								
						2/50	(4%)	
Overall Incidence						Total	2/50	(4%)
.....								
#Uterus:								
Adenocarcinoma or Adenoma								
						2/50	(4%)	
Overall Incidence						Total	2/50	(4%)
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

	Male		Female	
#Uterus:				
Adenoma				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Deciduoma Benign				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Granular Cell Tumor Benign				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Polyp Stromal				
		5/50 (10%)		
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%
.....				
#Uterus:				
Sarcoma				
		1/50 (2%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%
.....				
#Uterus:				
Sarcoma Stromal				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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 Report Date: 02/17/2020

	Male	Female
#Uterus:		
Sarcoma Stromal or Polyp Stromal		
Overall Incidence	Total 5/50 (10%)	Mean 10% SD 0%
#Uterus:		
Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Uterus:		
Squamous Cell Carcinoma		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Vagina:		
Granular Cell Tumor Benign		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Vagina:		
Polyp		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Vagina:		
Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

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	Male				Female			
#Zymbal's Gland:								
Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Zymbal's Gland:								
Carcinoma or Adenoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: PERINATAL AND POSTNATAL

Vehicle: FEED

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Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
Battelle Columbus Laboratory	051018802	06/27/11	729	50(2)	25(648)	593.4	Di(2-ethylhexyl) Phthalate
Battelle Columbus Laboratory	051098701	08/30/10	729	49(2)	27(672)	628.3	Dibutyl Phthalate
Battelle Columbus Laboratory	051026001	11/08/10	729	50(2)	30(706)	615.3	2-Hydroxy-4-methoxybenzophenone
Battelle Columbus Laboratory	052061401	10/27/08	N/A	0(0)	0(0)	N/A	Perfluorooctanoic Acid
Battelle Columbus Laboratory	052061402	07/27/09	743	50(2)	36(684)	609.5	Perfluorooctanoic Acid
Female							
Battelle Columbus Laboratory	051018802	06/28/11	732	50(4)	31(684)	376.1	Di(2-ethylhexyl) Phthalate
Battelle Columbus Laboratory	051098701	08/31/10	730	50(4)	29(668)	397.3	Dibutyl Phthalate
Battelle Columbus Laboratory	051026001	11/09/10	730	50(4)	30(657)	379.6	2-Hydroxy-4-methoxybenzophenone
Battelle Columbus Laboratory	052061401	10/28/08	744	50(4)	23(649)	385.9	Perfluorooctanoic Acid
Battelle Columbus Laboratory	052061402	N/A	N/A	0(0)	0(0)	N/A	Perfluorooctanoic Acid

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male			Female		
#All Organs:							
Benign Tumors							
		28/50 (56%)	35/49 (71%) 32/50 (64%)	38/50 (76%)	41/50 (82%) 39/50 (78%)	40/50 (80%)	41/50 (82%)
Overall Incidence	Total	133/199 (66.83%)	Mean 66.86%	SD 8.77%	Total	161/200 (80.5%)	Mean 80.5% SD 1.91%
.....							
#All Organs:							
Malignant Tumors							
		15/50 (30%)	14/49 (29%) 9/50 (18%)	11/50 (22%)	14/50 (28%) 14/50 (28%)	13/50 (26%)	15/50 (30%)
Overall Incidence	Total	49/199 (24.62%)	Mean 24.64%	SD 5.63%	Total	56/200 (28%)	Mean 28% SD 1.63%
.....							
#All Organs:							
Malignant and Benign Tumors							
		36/50 (72%)	41/49 (84%) 37/50 (74%)	42/50 (84%)	44/50 (88%) 47/50 (94%)	44/50 (88%)	47/50 (94%)
Overall Incidence	Total	156/199 (78.39%)	Mean 78.42%	SD 6.31%	Total	182/200 (91%)	Mean 91% SD 3.46%
.....							
#All Organs:							
Hemangioma							
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)	1/50 (2%) 0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5% SD 1%
.....							
#All Organs:							
Hemangiosarcoma							
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)	1/50 (2%) 0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5% SD 1%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male				Female			
#All Organs:									
Hemangiosarcoma or Hemangioma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		2/50 (4%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	2/200 (1%)	Mean 1%	SD 2%	
.....									
#All Organs:									
Histiocytic Sarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Leukemia: Granulocytic									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#All Organs:									
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
			3/50 (6%)			1/50 (2%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 3%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
#All Organs:									
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
			1/50 (2%)			1/50 (2%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	2/200 (1%)	Mean 1%	SD 1.15%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male				Female			
#All Organs:									
Malignant Schwannoma									
		6/50 (12%)	3/49 (6%)	1/50 (2%)		3/50 (6%)	2/50 (4%)	0/50 (0%)	
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	11/199 (5.53%)	Mean 5.53%	SD 4.73%	Total	5/200 (2.5%)	Mean 2.5%	SD 3%	
.....									
#All Organs:									
Mesothelioma: Benign, Malignant, NOS									
		1/50 (2%)	1/49 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	4/199 (2.01%)	Mean 2.01%	SD 0.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Mesothelioma: Malignant									
		1/50 (2%)	1/49 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	4/199 (2.01%)	Mean 2.01%	SD 0.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Osteosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			1/50 (2%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#All Organs:									
Osteosarcoma or Osteoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			1/50 (2%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male				Female			
*Adrenal Cortex:									
Adenoma									
		0/50 (0%)	0/49 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	3/50 (6%)	
			0/50 (0%)			2/50 (4%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 3%	Total	5/200 (2.5%)	Mean 2.5%	SD 3%	
.....									
*Adrenal Cortex:									
Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Adrenal Medulla:									
Ganglioneuroma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Adrenal Medulla:									
Pheochromocytoma Benign									
		5/50 (10%)	7/49 (14%)	9/50 (18%)		0/50 (0%)	0/50 (0%)	3/50 (6%)	
			8/50 (16%)			1/50 (2%)			
Overall Incidence	Total	29/199 (14.57%)	Mean 14.57%	SD 3.4%	Total	4/200 (2%)	Mean 2%	SD 2.83%	
.....									
*Adrenal Medulla:									
Pheochromocytoma Complex									
		1/50 (2%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
*Adrenal Medulla:									
Pheochromocytoma Malignant									
		0/50 (0%)	1/49 (2%) 0/50 (0%)	3/50 (6%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	2/50 (4%)	
Overall Incidence	Total	4/199 (2.01%)	Mean 2.01%	SD 2.83%	Total	2/200 (1%)	Mean 1%	SD 2%	
.....									
*Adrenal Medulla:									
Pheochromocytoma: Benign, Complex, Malignant, NOS									
		6/50 (12%)	8/49 (16%) 8/50 (16%)	12/50 (24%)		0/50 (0%) 1/50 (2%)	0/50 (0%)	5/50 (10%)	
Overall Incidence	Total	34/199 (17.09%)	Mean 17.08%	SD 5.01%	Total	6/200 (3%)	Mean 3%	SD 4.76%	
.....									
#Bone:									
Osteosarcoma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 1/50 (2%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Bone:									
Osteosarcoma or Osteoma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 1/50 (2%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Brain:									
Glioma Malignant									
		0/50 (0%)	2/49 (4%) 1/50 (2%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	1/50 (2%)	0/50 (0%)	
Overall Incidence	Total	3/199 (1.51%)	Mean 1.52%	SD 1.95%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
*Brain:									
Granular Cell Tumor Benign									
		0/50 (0%)	0/49 (0%)	2/50 (4%)		1/50 (2%)	0/50 (0%)	1/50 (2%)	
			2/50 (4%)			0/50 (0%)			
Overall Incidence	Total	4/199 (2.01%)	Mean 2%	SD 2.31%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
*Brain:									
Granular Cell Tumor Malignant									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Brain:									
Meningioma Benign									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Brain:									
Meningioma Malignant									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Brain:									
Meningioma: Benign, Malignant, NOS									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
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 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
*Brain:									
Oligodendroglioma, Glioma, or Astrocytoma									
		0/50 (0%)	2/49 (4%) 1/50 (2%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	1/50 (2%)	0/50 (0%)	
Overall Incidence	Total	3/199 (1.51%)	Mean 1.52%	SD 1.95%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Brain:									
Schwannoma Malignant									
		0/50 (0%)	0/49 (0%) 1/50 (2%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Clitoral/Preputial Gland:									
Adenoma									
		0/50 (0%)	1/49 (2%) 0/50 (0%)	0/49 (0%)		0/50 (0%) 0/50 (0%)	0/49 (0%)	0/48 (0%)	
Overall Incidence	Total	1/198 (0.51%)	Mean 0.51%	SD 1.02%	Total	0/197 (0%)	Mean 0%	SD 0%	
.....									
*Clitoral/Preputial Gland:									
Carcinoma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	1/49 (2%)		0/50 (0%) 1/50 (2%)	0/49 (0%)	0/48 (0%)	
Overall Incidence	Total	1/198 (0.51%)	Mean 0.51%	SD 1.02%	Total	1/197 (0.51%)	Mean 0.5%	SD 1%	
.....									
*Clitoral/Preputial Gland:									
Carcinoma or Adenoma									
		0/50 (0%)	1/49 (2%) 0/50 (0%)	1/49 (2%)		0/50 (0%) 1/50 (2%)	0/49 (0%)	0/48 (0%)	
Overall Incidence	Total	2/198 (1.01%)	Mean 1.02%	SD 1.18%	Total	1/197 (0.51%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
*Clitoral/Preputial Gland:									
Squamous Cell Carcinoma									
		0/50 (0%)	1/49 (2%) 0/50 (0%)	0/49 (0%)		0/50 (0%) 0/50 (0%)	0/49 (0%)	0/48 (0%)	
Overall Incidence	Total	1/198 (0.51%)	Mean 0.51%	SD 1.02%	Total	0/197 (0%)	Mean 0%	SD 0%	
.....									
*Clitoral/Preputial Gland:									
Squamous Cell Papilloma									
		1/50 (2%)	0/49 (0%) 0/50 (0%)	0/49 (0%)		0/50 (0%) 0/50 (0%)	0/49 (0%)	0/48 (0%)	
Overall Incidence	Total	1/198 (0.51%)	Mean 0.5%	SD 1%	Total	0/197 (0%)	Mean 0%	SD 0%	
.....									
*Epididymis:									
Sarcoma									
		0/49 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)					
Overall Incidence	Total	0/198 (0%)	Mean 0%	SD 0%					
.....									
#Eye:									
Leiomyoma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Heart:									
Schwannoma Malignant									
		2/50 (4%)	2/49 (4%) 0/50 (0%)	1/50 (2%)		0/49 (0%) 0/50 (0%)	0/50 (0%)	0/49 (0%)	
Overall Incidence	Total	5/199 (2.51%)	Mean 2.52%	SD 1.94%	Total	0/198 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male				Female								
#Intestine Large: Colon/Rectum:														
Granular Cell Tumor Benign														
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
				0/50	(0%)			0/50	(0%)					
Overall Incidence	Total	0/199 (0%)		Mean	0%	SD	0%	Total	0/200 (0%)		Mean	0%	SD	0%
.....														
#Intestine Large: Colon/Rectum:														
Leiomyoma														
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
				0/50	(0%)			0/50	(0%)					
Overall Incidence	Total	0/199 (0%)		Mean	0%	SD	0%	Total	0/200 (0%)		Mean	0%	SD	0%
.....														
#Intestine Small: Jejunum:														
Carcinoma														
		2/50	(4%)	0/49	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)			
				1/50	(2%)			1/50	(2%)					
Overall Incidence	Total	4/199 (2.01%)		Mean	2%	SD	1.63%	Total	1/200 (0.5%)		Mean	0.5%	SD	1%
.....														
#Intestine Small: Jejunum:														
Leiomyosarcoma														
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
				0/50	(0%)			0/50	(0%)					
Overall Incidence	Total	0/199 (0%)		Mean	0%	SD	0%	Total	0/200 (0%)		Mean	0%	SD	0%
.....														
#Intestine Small: Site Unspecified:														
Carcinoma														
		2/50	(4%)	0/49	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)			
				1/50	(2%)			1/50	(2%)					
Overall Incidence	Total	4/199 (2.01%)		Mean	2%	SD	1.63%	Total	1/200 (0.5%)		Mean	0.5%	SD	1%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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		Male				Female			
#Intestine Small: Site Unspecified:									
Carcinoma or Adenoma									
		2/50 (4%)	0/49 (0%) 1/50 (2%)	1/50 (2%)		0/50 (0%) 1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	4/199 (2.01%)	Mean 2%	SD 1.63%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Intestine Small: Site Unspecified:									
Leiomyosarcoma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Islets, Pancreatic:									
Adenoma									
		2/50 (4%)	4/49 (8%) 5/50 (10%)	3/50 (6%)		3/49 (6%) 1/50 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	14/199 (7.04%)	Mean 7.04%	SD 2.6%	Total	5/199 (2.51%)	Mean 2.53%	SD 2.57%	
.....									
*Islets, Pancreatic:									
Carcinoma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/49 (0%) 0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Islets, Pancreatic:									
Carcinoma or Adenoma									
		2/50 (4%)	4/49 (8%) 5/50 (10%)	3/50 (6%)		3/49 (6%) 1/50 (2%)	1/50 (2%)	1/50 (2%)	1/50 (2%)
Overall Incidence	Total	14/199 (7.04%)	Mean 7.04%	SD 2.6%	Total	6/199 (3.02%)	Mean 3.03%	SD 2.06%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male				Female			
*Kidney: Pelvis and Transitional Epithelium:									
Papilloma									
		0/50 (0%)	0/49 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule:									
Adenoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.51%	SD 1.01%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule:									
Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule:									
Carcinoma or Adenoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.51%	SD 1.01%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule:									
Lipoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
*Kidney: Renal Tubule: Liposarcoma									
		0/50 (0%)	0/49 (0%) 1/50 (2%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Nephroblastoma									
		0/50 (0%)	0/49 (0%) 1/50 (2%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Oncocytoma Benign									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Polyp Adenomatous									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Lacrimal Gland: Carcinoma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		1/50 (2%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
*Liver:									
Cholangiocarcinoma									
		0/50 (0%)	0/49 (0%) 1/50 (2%)	0/50 (0%)		0/49 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Liver:									
Cholangioma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		1/49 (2%) 1/50 (2%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	
.....									
*Liver:									
Hemangioma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/49 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Liver:									
Hepatocellular Adenoma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		1/49 (2%) 2/50 (4%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	3/199 (1.51%)	Mean 1.51%	SD 1.92%	
.....									
*Liver:									
Hepatocellular Carcinoma									
		1/50 (2%)	1/49 (2%) 0/50 (0%)	0/50 (0%)		0/49 (0%) 1/50 (2%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
*Liver:									
Hepatocellular Carcinoma or Hepatoblastoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			1/50 (2%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatocellular Adenoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			3/50 (6%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	4/199 (2.01%)	Mean 2.01%	SD 2.83%	
.....									
*Liver:									
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			3/50 (6%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	4/199 (2.01%)	Mean 2.01%	SD 2.83%	
.....									
*Lung:									
Alveolar/Bronchiolar Adenoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/49 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/198 (0%)	Mean 0%	SD 0%	
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma									
		0/50 (0%)	0/49 (0%)	1/50 (2%)		0/49 (0%)	0/50 (0%)	0/49 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/198 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
*Lung:									
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma									
		0/50 (0%)	1/49 (2%)	1/50 (2%)		0/49 (0%)	0/50 (0%)	0/49 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/198 (0%)	Mean 0%	SD 0%	
.....									
*Lung:									
Sarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/49 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/198 (0%)	Mean 0%	SD 0%	
.....									
*Lung:									
Squamous Cell Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/49 (0%)	
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/198 (0%)	Mean 0%	SD 0%	
.....									
#Lymph Node, Mesenteric:									
Hemangiosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland:									
Adenolipoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
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Toxicology Data Management System
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		Male				Female			
#Mammary Gland: Adenoma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		1/50 (2%) 1/50 (2%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
#Mammary Gland: Carcinoma									
		1/50 (2%)	0/49 (0%) 0/50 (0%)	2/50 (4%)		1/50 (2%) 3/50 (6%)	4/50 (8%)	7/50 (14%)	
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 1.91%	Total	15/200 (7.5%)	Mean 7.5%	SD 5%	
#Mammary Gland: Carcinoma or Adenoma									
		1/50 (2%)	0/49 (0%) 0/50 (0%)	2/50 (4%)		2/50 (4%) 4/50 (8%)	4/50 (8%)	7/50 (14%)	
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 1.91%	Total	17/200 (8.5%)	Mean 8.5%	SD 4.12%	
#Mammary Gland: Fibroadenoma									
		2/50 (4%)	1/49 (2%) 2/50 (4%)	2/50 (4%)		28/50 (56%) 21/50 (42%)	33/50 (66%)	32/50 (64%)	
Overall Incidence	Total	7/199 (3.52%)	Mean 3.51%	SD 0.98%	Total	114/200 (57%)	Mean 57%	SD 10.89%	
#Mammary Gland: Fibroma, Fibroadenoma or Adenoma									
		2/50 (4%)	1/49 (2%) 2/50 (4%)	2/50 (4%)		29/50 (58%) 22/50 (44%)	33/50 (66%)	32/50 (64%)	
Overall Incidence	Total	7/199 (3.52%)	Mean 3.51%	SD 0.98%	Total	116/200 (58%)	Mean 58%	SD 9.93%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
#Mammary Gland:									
Fibroma, Fibroadenoma, Carcinoma, or Adenoma									
		3/50 (6%)	1/49 (2%) 2/50 (4%)	3/50 (6%)		30/50 (60%) 25/50 (50%)	35/50 (70%)	36/50 (72%)	
Overall Incidence	Total	9/199 (4.52%)	Mean 4.51%	SD 1.9%	Total	126/200 (63%)	Mean 63%	SD 10.13%	
.....									
#Mammary Gland:									
Myoepithelioma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Nose:									
Carcinoma									
		0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 1/50 (2%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma									
		0/50 (0%)	1/49 (2%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma									
		0/50 (0%)	1/49 (2%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
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 Strain: Harlan Sprague-Dawley
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Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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		Male				Female			
#Oral Mucosa:									
Squamous Cell Carcinoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Ovary:									
Cystadenoma									
						0/50 (0%)	0/50 (0%)	0/50 (0%)	
						0/50 (0%)			
Overall Incidence	Total				Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Ovary:									
Granulosa Cell Tumor Benign									
						1/50 (2%)	0/50 (0%)	0/50 (0%)	
						1/50 (2%)			
Overall Incidence	Total				Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
*Ovary:									
Granulosa Cell Tumor Malignant									
						1/50 (2%)	0/50 (0%)	0/50 (0%)	
						0/50 (0%)			
Overall Incidence	Total				Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Ovary:									
Granulosa Cell Tumor: Benign, Malignant, NOS									
						2/50 (4%)	0/50 (0%)	0/50 (0%)	
						1/50 (2%)			
Overall Incidence	Total				Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
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 Strain: Harlan Sprague-Dawley
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	Male	Female
*Ovary:		
Granulosa-Theca Tumor Benign		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%
.....		
*Ovary:		
Granulosa-Theca Tumor Malignant		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%
.....		
*Ovary:		
Luteoma		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%
.....		
*Ovary:		
Schwannoma Malignant		
	0/50 (0%)	1/50 (2%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 1/200 (0.5%)	Mean 0.5% SD 1%
.....		
*Ovary:		
Sertoli Cell Tumor Benign		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
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 Strain: Harlan Sprague-Dawley
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 Tumor Incidence for Selected Control Animal Groups
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					Male		Female			
*Ovary:										
Thecoma Benign										
						0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
						0/50 (0%)				
Overall Incidence					Total	0/200 (0%)	Mean 0%		SD 0%	
.....										
*Ovary:										
Tubulostromal Carcinoma										
						0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
						0/50 (0%)				
Overall Incidence					Total	0/200 (0%)	Mean 0%		SD 0%	
.....										
*Pancreas:										
Adenoma										
		10/50 (20%)	4/49 (8%)	5/50 (10%)			0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			3/50 (6%)				0/50 (0%)			
Overall Incidence	Total	22/199 (11.06%)	Mean 11.04%	SD 6.19%	Total	0/199 (0%)	Mean 0%		SD 0%	
.....										
*Pancreas:										
Carcinoma										
		0/50 (0%)	2/49 (4%)	0/50 (0%)			0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.02%	SD 2.04%	Total	0/199 (0%)	Mean 0%		SD 0%	
.....										
*Pancreas:										
Carcinoma or Adenoma										
		10/50 (20%)	6/49 (12%)	5/50 (10%)			0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			3/50 (6%)				0/50 (0%)			
Overall Incidence	Total	24/199 (12.06%)	Mean 12.06%	SD 5.89%	Total	0/199 (0%)	Mean 0%		SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
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		Male				Female			
*Parathyroid Gland:									
Adenoma									
		0/42 (0%)	0/48 (0%) 0/41 (0%)	0/49 (0%)		0/42 (0%) 0/47 (0%)	0/45 (0%)	1/41 (2%)	
Overall Incidence	Total	0/180 (0%)	Mean 0%	SD 0%	Total	1/175 (0.57%)	Mean 0.61%	SD 1.22%	
.....									
#Peripheral Nerve:									
Paranglioma									
		0/50 (0%)	1/49 (2%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Peripheral Nerve:									
Schwannoma Malignant									
		0/50 (0%)	1/49 (2%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Peripheral Nerve:									
Schwannoma: Benign, Malignant, NOS									
		0/50 (0%)	1/49 (2%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Adenoma									
		4/50 (8%)	15/48 (31%) 5/50 (10%)	14/50 (28%)		15/49 (31%) 22/50 (44%)	12/50 (24%)	19/50 (38%)	
Overall Incidence	Total	38/198 (19.19%)	Mean 19.31%	SD 12.01%	Total	68/199 (34.17%)	Mean 34.15%	SD 8.71%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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		Male				Female			
*Pituitary Gland: Pars Distalis or Unspecified Site:									
 Carcinoma									
		0/50 (0%)	0/48 (0%)	0/50 (0%)		1/49 (2%)	1/50 (2%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/198 (0%)	Mean 0%	SD 0%	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
 Carcinoma or Adenoma									
		4/50 (8%)	15/48 (31%)	14/50 (28%)		16/49 (33%)	13/50 (26%)	19/50 (38%)	
			5/50 (10%)			22/50 (44%)			
Overall Incidence	Total	38/198 (19.19%)	Mean 19.31%	SD 12.01%	Total	70/199 (35.18%)	Mean 35.16%	SD 7.67%	
.....									
*Pituitary Gland: Pars Intermedia:									
 Adenoma									
		0/50 (0%)	0/48 (0%)	2/50 (4%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	2/198 (1.01%)	Mean 1%	SD 2%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Pituitary Gland: Pars Intermedia:									
 Carcinoma or Adenoma									
		0/50 (0%)	0/48 (0%)	2/50 (4%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	2/198 (1.01%)	Mean 1%	SD 2%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Pituitary Gland: Pars Nervosa:									
 Schwannoma Malignant									
		0/50 (0%)	0/48 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/198 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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		Male				Female				
*Prostate:										
Adenoma										
		0/50	(0%)	1/49	(2%)	0/50	(0%)			
				3/50	(6%)					
Overall Incidence	Total	4/199 (2.01%)		Mean 2.01%		SD 2.83%				
.....										
*Prostate:										
Carcinoma or Adenoma										
		0/50	(0%)	1/49	(2%)	0/50	(0%)			
				3/50	(6%)					
Overall Incidence	Total	4/199 (2.01%)		Mean 2.01%		SD 2.83%				
.....										
*Salivary Glands:										
Schwannoma Malignant										
		2/50	(4%)	0/49	(0%)	0/50	(0%)	0/49	(0%)	
				0/49	(0%)			0/49	(0%)	
Overall Incidence	Total	2/198 (1.01%)		Mean 1%		SD 2%	Total	0/196 (0%)	Mean 0%	SD 0%
.....										
#Seminal Vesicle:										
Hemangiosarcoma										
		0/50	(0%)	0/49	(0%)	0/50	(0%)			
				0/50	(0%)					
Overall Incidence	Total	0/199 (0%)		Mean 0%		SD 0%				
.....										
#Skeletal Muscle:										
Hemangioma										
		0/50	(0%)	0/49	(0%)	0/50	(0%)	1/50	(2%)	
				0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/199 (0%)		Mean 0%		SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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		Male				Female			
#Skeletal Muscle:									
Liposarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skeletal Muscle:									
Sarcoma									
		1/50 (2%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Adenoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Adenoma or Basosquamous Tumor Benign									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.51%	SD 1.01%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
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		Male				Female			
#Skin:									
Basal Cell Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.51%	SD 1.01%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma									
		4/50 (8%)	9/49 (18%)	4/50 (8%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			6/50 (12%)			0/50 (0%)			
Overall Incidence	Total	23/199 (11.56%)	Mean 11.59%	SD 4.89%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Fibroma									
		3/50 (6%)	3/49 (6%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	10/199 (5.03%)	Mean 5.03%	SD 2.02%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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		Male				Female			
#Skin:									
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma									
		3/50 (6%)	4/49 (8%)	3/50 (6%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
			2/50 (4%)			1/50 (2%)			
Overall Incidence	Total	12/199 (6.03%)	Mean 6.04%	SD 1.7%	Total	3/200 (1.5%)	Mean 1.5%	SD 1%	
.....									
#Skin:									
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma									
		3/50 (6%)	4/49 (8%)	3/50 (6%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
			2/50 (4%)			1/50 (2%)			
Overall Incidence	Total	12/199 (6.03%)	Mean 6.04%	SD 1.7%	Total	3/200 (1.5%)	Mean 1.5%	SD 1%	
.....									
#Skin:									
Fibrosarcoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
			1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
			1/50 (2%)			1/50 (2%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	3/200 (1.5%)	Mean 1.5%	SD 1%	
.....									
#Skin:									
Hemangioma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
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		Male				Female			
#Skin:									
Hemangiopericytoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Hemangiosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Keratoacanthoma									
		2/50 (4%)	8/49 (16%)	2/50 (4%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			5/50 (10%)			0/50 (0%)			
Overall Incidence	Total	17/199 (8.54%)	Mean 8.58%	SD 5.89%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Lipoma									
		0/50 (0%)	0/49 (0%)	2/50 (4%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 2%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Liposarcoma									
		1/50 (2%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
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		Male				Female			
#Skin:									
Malignant Fibrous Histiocytoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Neurofibrosarcoma or Schwannoma (malignant or NOS)									
		2/50 (4%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 2%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
#Skin:									
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)									
		2/50 (4%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 2%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
#Skin:									
Osteosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Pilomatrixoma									
		0/50 (0%)	3/49 (6%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.53%	SD 3.06%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
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		Male				Female			
#Skin:									
Sarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			1/50 (2%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Schwannoma Malignant									
		2/50 (4%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 2%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
#Skin:									
Squamous Cell Carcinoma									
		1/50 (2%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma									
		1/50 (2%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Squamous Cell Papilloma									
		0/50 (0%)	0/49 (0%)	2/50 (4%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 2%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
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		Male				Female			
#Skin:									
Squamous Cell Papilloma or Papilloma									
		0/50 (0%)	0/49 (0%)	2/50 (4%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 2%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma									
		3/50 (6%)	8/49 (16%)	4/50 (8%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
			5/50 (10%)			0/50 (0%)			
Overall Incidence	Total	20/199 (10.05%)	Mean 10.08%	SD 4.47%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma									
		2/50 (4%)	8/49 (16%)	4/50 (8%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			5/50 (10%)			0/50 (0%)			
Overall Incidence	Total	19/199 (9.55%)	Mean 9.58%	SD 5.14%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Trichoepithelioma									
		1/50 (2%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin: Sebaceous Gland:									
Adenoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
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		Male				Female			
#Skin: Sebaceous Gland:									
Carcinoma or Adenoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Spinal Cord:									
Astrocytoma Malignant									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			1/50 (2%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Spleen:									
Hemangiosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	
.....									
#Stomach, Forestomach:									
Sarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Stomach, Forestomach:									
Squamous Cell Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
#Stomach, Forestomach:									
Squamous Cell Carcinoma or Papilloma Squamous									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Stomach, Forestomach:									
Squamous Cell Papilloma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Testis:									
Adenoma									
		3/49 (6%)	2/49 (4%)	1/50 (2%)					
			0/50 (0%)						
Overall Incidence	Total	6/198 (3.03%)	Mean 3.05%	SD 2.64%					
.....									
*Thymus:									
Thymoma Benign									
		0/47 (0%)	0/48 (0%)	0/46 (0%)		0/46 (0%)	0/49 (0%)	0/49 (0%)	0/49 (0%)
			0/48 (0%)			0/49 (0%)			
Overall Incidence	Total	0/189 (0%)	Mean 0%	SD 0%	Total	0/193 (0%)	Mean 0%	SD 0%	
.....									
*Thymus:									
Thymoma Malignant									
		0/47 (0%)	0/48 (0%)	0/46 (0%)		0/46 (0%)	0/49 (0%)	0/49 (0%)	0/49 (0%)
			0/48 (0%)			0/49 (0%)			
Overall Incidence	Total	0/189 (0%)	Mean 0%	SD 0%	Total	0/193 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male			Female		
*Thymus:							
Thymoma: Benign, Malignant, NOS							
		0/47 (0%)	0/48 (0%) 0/48 (0%)	0/46 (0%)	0/46 (0%) 0/49 (0%)	0/49 (0%)	0/49 (0%)
Overall Incidence	Total	0/189 (0%)	Mean 0%	SD 0%	Total	0/193 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: C-Cell:							
Adenoma							
		10/50 (20%)	8/49 (16%) 11/49 (22%)	7/50 (14%)	8/49 (16%) 9/50 (18%)	12/50 (24%)	5/50 (10%)
Overall Incidence	Total	36/198 (18.18%)	Mean 18.19%	SD 3.76%	Total	34/199 (17.09%)	Mean 17.08% SD 5.76%
.....							
*Thyroid Gland: C-Cell:							
Carcinoma							
		1/50 (2%)	1/49 (2%) 0/49 (0%)	1/50 (2%)	0/49 (0%) 1/50 (2%)	1/50 (2%)	1/50 (2%)
Overall Incidence	Total	3/198 (1.52%)	Mean 1.51%	SD 1.01%	Total	3/199 (1.51%)	Mean 1.5% SD 1%
.....							
*Thyroid Gland: C-Cell:							
Carcinoma or Adenoma							
		10/50 (20%)	8/49 (16%) 11/49 (22%)	8/50 (16%)	8/49 (16%) 9/50 (18%)	13/50 (26%)	6/50 (12%)
Overall Incidence	Total	37/198 (18.69%)	Mean 18.69%	SD 3.09%	Total	36/199 (18.09%)	Mean 18.08% SD 5.85%
.....							
*Thyroid Gland: Follicular Cell:							
Adenoma							
		0/50 (0%)	1/49 (2%) 0/49 (0%)	0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/198 (0.51%)	Mean 0.51%	SD 1.02%	Total	0/199 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male				Female			
*Thyroid Gland: Follicular Cell: Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/49 (0%)			0/50 (0%)			
Overall Incidence	Total	0/198 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/49 (0%)			0/50 (0%)			
Overall Incidence	Total	1/198 (0.51%)	Mean 0.51%	SD 1.02%	Total	0/199 (0%)	Mean 0%	SD 0%	
#Tissue NOS: Schwannoma Malignant									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
#Tongue: Squamous Cell Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
#Tongue: Squamous Cell Carcinoma or Papilloma Squamous									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
#Tooth:									
Odontoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Urinary Bladder:									
Leiomyosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/49 (0%)	
			0/49 (0%)			0/50 (0%)			
Overall Incidence	Total	0/198 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
#Uterus:									
Adenocarcinoma									
						3/50 (6%)	1/50 (2%)	5/50 (10%)	
						1/50 (2%)			
Overall Incidence	Total				Total	10/200 (5%)	Mean 5%	SD 3.83%	
.....									
#Uterus:									
Adenocarcinoma or Adenoma									
						3/50 (6%)	1/50 (2%)	5/50 (10%)	
						2/50 (4%)			
Overall Incidence	Total				Total	11/200 (5.5%)	Mean 5.5%	SD 3.42%	
.....									
#Uterus:									
Adenoma									
						0/50 (0%)	0/50 (0%)	0/50 (0%)	
						1/50 (2%)			
Overall Incidence	Total				Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

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	Male	Female
#Uterus: Deciduoma Benign		
	1/50 (2%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
Overall Incidence	Total 1/200 (0.5%)	Mean 0.5% SD 1%
#Uterus: Granular Cell Tumor Benign		
	1/50 (2%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
Overall Incidence	Total 1/200 (0.5%)	Mean 0.5% SD 1%
#Uterus: Polyp Stromal		
	8/50 (16%) 16/50 (32%)	5/50 (10%) 8/50 (16%)
Overall Incidence	Total 37/200 (18.5%)	Mean 18.5% SD 9.43%
#Uterus: Sarcoma		
	0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%
#Uterus: Sarcoma Stromal		
	0/50 (0%) 1/50 (2%)	1/50 (2%) 0/50 (0%)
Overall Incidence	Total 2/200 (1%)	Mean 1% SD 1.15%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

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	Male	Female
#Uterus: Sarcoma Stromal or Polyp Stromal		
	8/50 (16%) 16/50 (32%)	6/50 (12%) 8/50 (16%)
Overall Incidence	Total 38/200 (19%)	Mean 19% SD 8.87%
#Uterus: Schwannoma Malignant		
	1/50 (2%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
Overall Incidence	Total 1/200 (0.5%)	Mean 0.5% SD 1%
#Uterus: Squamous Cell Carcinoma		
	0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%
#Vagina: Granular Cell Tumor Benign		
	0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%
#Vagina: Polyp		
	0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

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					Male						Female
#Vagina:											
Schwannoma Malignant											
						1/50 (2%)		0/50 (0%)		0/50 (0%)	
						0/50 (0%)					
Overall Incidence					Total	1/200 (0.5%)		Mean 0.5%		SD 1%	
.....											
#Zymbal's Gland:											
Carcinoma											
					1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
						0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/200 (0%)		Mean 0%		SD 0%	
.....											
#Zymbal's Gland:											
Carcinoma or Adenoma											
					1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
						0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/200 (0%)		Mean 0%		SD 0%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
Contract/Lab: All Laboratories
Species: RATS
Strain: Harlan Sprague-Dawley
Length of Study: CHRONIC

Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
Route: PERINATAL AND POSTNATAL
Vehicle: WATER

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Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
Battelle Columbus Laboratory	050303803	01/30/12	729	50(2)	12(621)	610.8	Sodium Tungstate Dihydrate
Female							
Battelle Columbus Laboratory	050303803	01/31/12	730	50(5)	30(667)	393.3	Sodium Tungstate Dihydrate

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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	Male				Female			
#All Organs:								
Benign Tumors								
		29/50 (58%)			39/50 (78%)			
Overall Incidence	Total	29/50 (58%)	Mean 58%	SD 0%	Total	39/50 (78%)	Mean 78%	SD 0%
.....								
#All Organs:								
Malignant Tumors								
		14/50 (28%)			17/50 (34%)			
Overall Incidence	Total	14/50 (28%)	Mean 28%	SD 0%	Total	17/50 (34%)	Mean 34%	SD 0%
.....								
#All Organs:								
Malignant and Benign Tumors								
		36/50 (72%)			47/50 (94%)			
Overall Incidence	Total	36/50 (72%)	Mean 72%	SD 0%	Total	47/50 (94%)	Mean 94%	SD 0%
.....								
#All Organs:								
Hemangioma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#All Organs:								
Hemangiosarcoma								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#All Organs:								
Hemangiosarcoma or Hemangioma								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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	Male				Female			
#All Organs:								
Histiocytic Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#All Organs:								
Leukemia: Granulocytic								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#All Organs:								
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
.....								
#All Organs:								
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type								
		1/50	(2%)			2/50	(4%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	2/50	(4%)
.....								
#All Organs:								
Malignant Schwannoma								
		1/50	(2%)			2/50	(4%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	2/50	(4%)
.....								
#All Organs:								
Mesothelioma: Benign, Malignant, NOS								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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		Male			Female		
#All Organs:							
Mesothelioma: Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#All Organs:							
Osteosarcoma							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
.....							
#All Organs:							
Osteosarcoma or Osteoma							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
.....							
*Adrenal Cortex:							
Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Adrenal Cortex:							
Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Adrenal Medulla:							
Ganglioneuroma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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	Male				Female			
*Adrenal Medulla:								
Pheochromocytoma Benign								
		10/50 (20%)			1/50 (2%)			
Overall Incidence	Total	10/50 (20%)	Mean 20%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
*Adrenal Medulla:								
Pheochromocytoma Complex								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Adrenal Medulla:								
Pheochromocytoma Malignant								
		2/50 (4%)			1/50 (2%)			
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
*Adrenal Medulla:								
Pheochromocytoma: Benign, Complex, Malignant, NOS								
		12/50 (24%)			2/50 (4%)			
Overall Incidence	Total	12/50 (24%)	Mean 24%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
.....								
#Bone:								
Osteosarcoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Bone:								
Osteosarcoma or Osteoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
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 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male			Female		
*Brain:							
 Glioma Malignant							
		2/50	(4%)		0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Granular Cell Tumor Benign							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Granular Cell Tumor Malignant							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma Benign							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma: Benign, Malignant, NOS							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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	Male				Female				
*Brain:									
Oligodendroglioma, Glioma, or Astrocytoma									
		2/50	(4%)			0/50	(0%)		
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Brain:									
Schwannoma Malignant									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Clitoral/Preputial Gland:									
Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Clitoral/Preputial Gland:									
Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Clitoral/Preputial Gland:									
Carcinoma or Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Clitoral/Preputial Gland:									
Squamous Cell Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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		Male				Female			
*Clitoral/Preputial Gland:									
Squamous Cell Papilloma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Epididymis:									
Sarcoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
#Eye:									
Leiomyoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Heart:									
Schwannoma Malignant									
		0/50	(0%)			2/50	(4%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)	Mean 4% SD 0%
.....									
#Intestine Large: Colon/Rectum:									
Granular Cell Tumor Benign									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Intestine Large: Colon/Rectum:									
Leiomyoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
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	Male				Female			
#Intestine Small: Jejunum: Carcinoma								
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Intestine Small: Jejunum: Leiomyosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Intestine Small: Site Unspecified: Carcinoma								
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Intestine Small: Site Unspecified: Carcinoma or Adenoma								
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Intestine Small: Site Unspecified: Leiomyosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Islets, Pancreatic: Adenoma								
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male			Female		
*Islets, Pancreatic:							
 Carcinoma							
		1/50	(2%)		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
.....							
*Islets, Pancreatic:							
 Carcinoma or Adenoma							
		3/50	(6%)		2/50	(4%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	2/50 (4%)
							Mean 4%
							SD 0%
.....							
*Kidney: Pelvis and Transitional Epithelium:							
 Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Kidney: Renal Tubule:							
 Adenoma							
		2/50	(4%)		0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Kidney: Renal Tubule:							
 Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Kidney: Renal Tubule:							
 Carcinoma or Adenoma							
		2/50	(4%)		0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
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 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
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		Male				Female			
*Kidney: Renal Tubule: Lipoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Liposarcoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Nephroblastoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Oncocytoma Benign									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Polyp Adenomatous									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
#Lacrimal Gland: Carcinoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
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Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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		Male			Female		
*Liver:							
Cholangiocarcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Liver:							
Cholangioma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Liver:							
Hemangioma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Liver:							
Hepatocellular Adenoma							
		1/50	(2%)		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
.....							
*Liver:							
Hepatocellular Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Liver:							
Hepatocellular Carcinoma or Hepatoblastoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
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Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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	Male				Female			
*Liver:								
Hepatocellular Carcinoma or Hepatocellular Adenoma								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
*Liver:								
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
*Lung:								
Alveolar/Bronchiolar Adenoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma								
		2/50	(4%)			0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
*Lung:								
Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
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Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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		Male				Female			
*Lung:									
Squamous Cell Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Lymph Node, Mesenteric:									
Hemangiosarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Mammary Gland:									
Adenolipoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Mammary Gland:									
Adenoma									
		0/50	(0%)			3/50	(6%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	3/50	(6%)	Mean 6% SD 0%
.....									
#Mammary Gland:									
Carcinoma									
		0/50	(0%)			2/50	(4%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)	Mean 4% SD 0%
.....									
#Mammary Gland:									
Carcinoma or Adenoma									
		0/50	(0%)			5/50	(10%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	5/50	(10%)	Mean 10% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
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 Tumor Incidence for Selected Control Animal Groups
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	Male				Female			
#Mammary Gland:								
Fibroadenoma								
		0/50	(0%)			30/50	(60%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	30/50 (60%)	Mean 60% SD 0%
.....								
#Mammary Gland:								
Fibroma, Fibroadenoma or Adenoma								
		0/50	(0%)			32/50	(64%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	32/50 (64%)	Mean 64% SD 0%
.....								
#Mammary Gland:								
Fibroma, Fibroadenoma, Carcinoma, or Adenoma								
		0/50	(0%)			34/50	(68%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	34/50 (68%)	Mean 68% SD 0%
.....								
#Mammary Gland:								
Myoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
*Nose:								
Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
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	Male				Female			
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Oral Mucosa:								
Squamous Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Ovary:								
Cystadenoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Granulosa Cell Tumor Benign								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Granulosa Cell Tumor Malignant								
						1/50	(2%)	
Overall Incidence						Total	1/50	(2%)
.....								
*Ovary:								
Granulosa Cell Tumor: Benign, Malignant, NOS								
						1/50	(2%)	
Overall Incidence						Total	1/50	(2%)
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
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	Male		Female	
*Ovary:				
Granulosa-Theca Tumor Benign				
		0/50	(0%)	
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
*Ovary:				
Granulosa-Theca Tumor Malignant				
		1/50	(2%)	
Overall Incidence		Total	1/50 (2%)	Mean 2% SD 0%
.....				
*Ovary:				
Luteoma				
		0/50	(0%)	
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
*Ovary:				
Schwannoma Malignant				
		0/50	(0%)	
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
*Ovary:				
Sertoli Cell Tumor Benign				
		0/50	(0%)	
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
*Ovary:				
Thecoma Benign				
		0/50	(0%)	
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
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Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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		Male			Female		
*Ovary:							
Tubulostromal Carcinoma							
					0/50 (0%)		
Overall Incidence					Total 0/50 (0%)	Mean 0%	SD 0%
.....							
*Pancreas:							
Adenoma							
		14/50 (28%)			0/50 (0%)		
Overall Incidence	Total	14/50 (28%)	Mean 28%	SD 0%	Total 0/50 (0%)	Mean 0%	SD 0%
.....							
*Pancreas:							
Carcinoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total 0/50 (0%)	Mean 0%	SD 0%
.....							
*Pancreas:							
Carcinoma or Adenoma							
		14/50 (28%)			0/50 (0%)		
Overall Incidence	Total	14/50 (28%)	Mean 28%	SD 0%	Total 0/50 (0%)	Mean 0%	SD 0%
.....							
*Parathyroid Gland:							
Adenoma							
		0/43 (0%)			0/46 (0%)		
Overall Incidence	Total	0/43 (0%)	Mean 0%	SD 0%	Total 0/46 (0%)	Mean 0%	SD 0%
.....							
#Peripheral Nerve:							
Paraganglioma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total 0/50 (0%)	Mean 0%	SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
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Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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	Male				Female			
#Peripheral Nerve:								
Schwannoma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
#Peripheral Nerve:								
Schwannoma: Benign, Malignant, NOS								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Adenoma								
		8/50	(16%)			16/50	(32%)	
Overall Incidence	Total	8/50	(16%)	Mean 16%	SD 0%	Total	16/50	(32%)
								Mean 32%
								SD 0%
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma or Adenoma								
		9/50	(18%)			17/50	(34%)	
Overall Incidence	Total	9/50	(18%)	Mean 18%	SD 0%	Total	17/50	(34%)
								Mean 34%
								SD 0%
*Pituitary Gland: Pars Intermedia:								
Adenoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
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 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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 Report Date: 02/17/2020

	Male				Female			
*Pituitary Gland: Pars Intermedia:								
Carcinoma or Adenoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
*Pituitary Gland: Pars Nervosa:								
Schwannoma Malignant								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
*Prostate:								
Adenoma								
		0/50	(0%)					
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%			
.....								
*Prostate:								
Carcinoma or Adenoma								
		0/50	(0%)					
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%			
.....								
*Salivary Glands:								
Schwannoma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Seminal Vesicle:								
Hemangiosarcoma								
		1/50	(2%)					
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%			
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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	Male				Female			
#Skeletal Muscle:								
Hemangioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skeletal Muscle:								
Liposarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skeletal Muscle:								
Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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	Male				Female			
#Skin:								
Basal Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Fibroma								
		3/50	(6%)			1/50	(2%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma								
		3/50	(6%)			3/50	(6%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	3/50	(6%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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 Report Date: 02/17/2020

	Male				Female			
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		3/50 (6%)			2/50 (4%)			
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
.....								
#Skin:								
Fibrosarcoma								
		0/50 (0%)			1/50 (2%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		0/50 (0%)			1/50 (2%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Hemangioma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangiopericytoma								
		0/50 (0%)			1/50 (2%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Hemangiosarcoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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	Male				Female			
#Skin:								
Keratoacanthoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Lipoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Liposarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Malignant Fibrous Histiocytoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Neurofibrosarcoma or Schwannoma (malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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	Male				Female			
#Skin:								
Osteosarcoma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
.....								
#Skin:								
Pilomatrixoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Schwannoma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Squamous Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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 Report Date: 02/17/2020

		Male			Female		
#Skin:							
Squamous Cell Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Skin:							
Squamous Cell Papilloma or Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Skin:							
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Skin:							
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Skin:							
Trichoepithelioma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Skin: Sebaceous Gland:							
Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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		Male				Female			
#Skin: Sebaceous Gland:									
Carcinoma or Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Spinal Cord:									
Astrocytoma Malignant									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Spleen:									
Hemangiosarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Stomach, Forestomach:									
Sarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Stomach, Forestomach:									
Squamous Cell Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Stomach, Forestomach:									
Squamous Cell Carcinoma or Papilloma Squamous									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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		Male			Female		
#Stomach, Forestomach:							
Squamous Cell Papilloma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Testis:							
Adenoma							
		1/50	(2%)				
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%		
.....							
*Thymus:							
Thymoma Benign							
		0/48	(0%)			0/47	(0%)
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/47 (0%)
							Mean 0%
							SD 0%
.....							
*Thymus:							
Thymoma Malignant							
		0/48	(0%)			0/47	(0%)
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/47 (0%)
							Mean 0%
							SD 0%
.....							
*Thymus:							
Thymoma: Benign, Malignant, NOS							
		0/48	(0%)			0/47	(0%)
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/47 (0%)
							Mean 0%
							SD 0%
.....							
*Thyroid Gland: C-Cell:							
Adenoma							
		4/50	(8%)			5/50	(10%)
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	5/50 (10%)
							Mean 10%
							SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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		Male			Female			
*Thyroid Gland: C-Cell: Carcinoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
.....								
*Thyroid Gland: C-Cell: Carcinoma or Adenoma								
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	7/50 (14%)	Mean 14%	SD 0%
.....								
*Thyroid Gland: Follicular Cell: Adenoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Thyroid Gland: Follicular Cell: Carcinoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Tissue NOS: Schwannoma Malignant								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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	Male				Female			
#Tongue:								
Squamous Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Tongue:								
Squamous Cell Carcinoma or Papilloma Squamous								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Tooth:								
Odontoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Urinary Bladder:								
Leiomyosarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Uterus:								
Adenocarcinoma								
						3/50	(6%)	
Overall Incidence						Total	3/50	(6%)
.....								
#Uterus:								
Adenocarcinoma or Adenoma								
						3/50	(6%)	
Overall Incidence						Total	3/50	(6%)
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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 Report Date: 02/17/2020

	Male		Female	
#Uterus:				
Adenoma				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Deciduoma Benign				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Granular Cell Tumor Benign				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Polyp Stromal				
		5/50 (10%)		
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%
.....				
#Uterus:				
Sarcoma				
		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Sarcoma Stromal				
		1/50 (2%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%
.....				

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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 Report Date: 02/17/2020

	Male	Female
#Uterus:		
Sarcoma Stromal or Polyp Stromal		
Overall Incidence	Total 6/50 (12%)	Mean 12% SD 0%
#Uterus:		
Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Uterus:		
Squamous Cell Carcinoma		
Overall Incidence	Total 2/50 (4%)	Mean 4% SD 0%
#Vagina:		
Granular Cell Tumor Benign		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Vagina:		
Polyp		
Overall Incidence	Total 1/50 (2%)	Mean 2% SD 0%
#Vagina:		
Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

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		Male				Female			
#Zymbal's Gland:									
Carcinoma									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Zymbal's Gland:									
Carcinoma or Adenoma									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
Contract/Lab: All Laboratories
Species: RATS
Strain: Harlan Sprague-Dawley
Length of Study: CHRONIC

Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
Route: Whole Body Exposure
Vehicle: AIR

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Report Date: 02/17/2020

Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
I. I. T. Research Institute	052010556	09/16/12	730	90(1)	25(642)	658.1	Radiofrequency Radiation
Female							
I. I. T. Research Institute	052010556	09/16/12	737	90(1)	48(659)	462.4	Radiofrequency Radiation

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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		Male			Female		
#All Organs:							
Benign Tumors							
		49/90 (54%)			82/90 (91%)		
Overall Incidence	Total	49/90 (54.44%)	Mean 54.44%	SD 0%	Total	82/90 (91.11%)	Mean 91.11% SD 0%
.....							
#All Organs:							
Malignant Tumors							
		24/90 (27%)			37/90 (41%)		
Overall Incidence	Total	24/90 (26.67%)	Mean 26.67%	SD 0%	Total	37/90 (41.11%)	Mean 41.11% SD 0%
.....							
#All Organs:							
Malignant and Benign Tumors							
		57/90 (63%)			89/90 (99%)		
Overall Incidence	Total	57/90 (63.33%)	Mean 63.33%	SD 0%	Total	89/90 (98.89%)	Mean 98.89% SD 0%
.....							
#All Organs:							
Hemangioma							
		0/90 (0%)			0/90 (0%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma							
		3/90 (3%)			3/90 (3%)		
Overall Incidence	Total	3/90 (3.33%)	Mean 3.33%	SD 0%	Total	3/90 (3.33%)	Mean 3.33% SD 0%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		3/90 (3%)			3/90 (3%)		
Overall Incidence	Total	3/90 (3.33%)	Mean 3.33%	SD 0%	Total	3/90 (3.33%)	Mean 3.33% SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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		Male			Female		
#All Organs:							
Histiocytic Sarcoma							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Leukemia: Granulocytic							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type							
		2/90	(2%)		5/90	(6%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	5/90 (5.56%)
							Mean 5.56%
							SD 0%
.....							
#All Organs:							
Malignant Schwannoma							
		3/90	(3%)		4/90	(4%)	
Overall Incidence	Total	3/90	(3.33%)	Mean 3.33%	SD 0%	Total	4/90 (4.44%)
							Mean 4.44%
							SD 0%
.....							
#All Organs:							
Mesothelioma: Benign, Malignant, NOS							
		2/90	(2%)		0/90	(0%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
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		Male			Female		
#All Organs:							
Mesothelioma: Malignant							
		2/90	(2%)		0/90	(0%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Osteosarcoma							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Osteosarcoma or Osteoma							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
*Adrenal Cortex:							
Adenoma							
		1/90	(1%)		1/90	(1%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	1/90 (1.11%)
							Mean 1.11%
							SD 0%
.....							
*Adrenal Cortex:							
Carcinoma							
		0/90	(0%)		1/90	(1%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)
							Mean 1.11%
							SD 0%
.....							
*Adrenal Medulla:							
Ganglioneuroma							
		0/88	(0%)		0/86	(0%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	0/86 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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	Male				Female				
*Adrenal Medulla:									
Pheochromocytoma Benign									
		10/88	(11%)			1/86	(1%)		
Overall Incidence	Total	10/88	(11.36%)	Mean 11.36%	SD 0%	Total	1/86 (1.16%)	Mean 1.16%	SD 0%
.....									
*Adrenal Medulla:									
Pheochromocytoma Complex									
		1/88	(1%)			0/86	(0%)		
Overall Incidence	Total	1/88	(1.14%)	Mean 1.14%	SD 0%	Total	0/86 (0%)	Mean 0%	SD 0%
.....									
*Adrenal Medulla:									
Pheochromocytoma Malignant									
		1/88	(1%)			0/86	(0%)		
Overall Incidence	Total	1/88	(1.14%)	Mean 1.14%	SD 0%	Total	0/86 (0%)	Mean 0%	SD 0%
.....									
*Adrenal Medulla:									
Pheochromocytoma: Benign, Complex, Malignant, NOS									
		11/88	(13%)			1/86	(1%)		
Overall Incidence	Total	11/88	(12.5%)	Mean 12.5%	SD 0%	Total	1/86 (1.16%)	Mean 1.16%	SD 0%
.....									
#Bone:									
Osteosarcoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
#Bone:									
Osteosarcoma or Osteoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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		Male			Female		
*Brain:							
 Glioma Malignant							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Granular Cell Tumor Benign							
		1/90	(1%)		1/90	(1%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	1/90 (1.11%)
							Mean 1.11%
							SD 0%
.....							
*Brain:							
 Granular Cell Tumor Malignant							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma Benign							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma Malignant							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma: Benign, Malignant, NOS							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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 Report Date: 02/17/2020

	Male				Female			
*Brain:								
Oligodendroglioma, Glioma, or Astrocytoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%
.....								
*Brain:								
Schwannoma Malignant								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland:								
Adenoma								
		0/88	(0%)			0/87	(0%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	0/87	(0%)
							Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland:								
Carcinoma								
		0/88	(0%)			0/87	(0%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	0/87	(0%)
							Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland:								
Carcinoma or Adenoma								
		0/88	(0%)			0/87	(0%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	0/87	(0%)
							Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland:								
Squamous Cell Carcinoma								
		0/88	(0%)			0/87	(0%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	0/87	(0%)
							Mean 0%	SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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		Male			Female		
*Clitoral/Preputial Gland:							
Squamous Cell Papilloma							
		0/88	(0%)		0/87	(0%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	0/87 (0%)
							Mean 0%
							SD 0%
.....							
*Epididymis:							
Sarcoma							
		0/90	(0%)				
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%		
.....							
#Eye:							
Leiomyoma							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
*Heart:							
Schwannoma Malignant							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
#Intestine Large: Colon/Rectum:							
Granular Cell Tumor Benign							
		0/90	(0%)		1/90	(1%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)
							Mean 1.11%
							SD 0%
.....							
#Intestine Large: Colon/Rectum:							
Leiomyoma							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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	Male				Female			
#Intestine Small: Jejunum: Carcinoma								
Overall Incidence	Total	2/90 (2%)	Mean 2.22%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
#Intestine Small: Jejunum: Leiomyosarcoma								
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11%	SD 0%
.....								
#Intestine Small: Site Unspecified: Carcinoma								
Overall Incidence	Total	2/90 (2.22%)	Mean 2.22%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
#Intestine Small: Site Unspecified: Carcinoma or Adenoma								
Overall Incidence	Total	2/90 (2.22%)	Mean 2.22%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
#Intestine Small: Site Unspecified: Leiomyosarcoma								
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11%	SD 0%
.....								
*Islets, Pancreatic: Adenoma								
Overall Incidence	Total	5/90 (5.56%)	Mean 5.56%	SD 0%	Total	5/90 (5.56%)	Mean 5.56%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
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		Male			Female		
*Islets, Pancreatic:							
 Carcinoma							
		8/90 (9%)			2/90 (2%)		
Overall Incidence	Total	8/90 (8.89%)	Mean 8.89%	SD 0%	Total	2/90 (2.22%)	Mean 2.22% SD 0%
.....							
*Islets, Pancreatic:							
 Carcinoma or Adenoma							
		13/90 (14%)			7/90 (8%)		
Overall Incidence	Total	13/90 (14.44%)	Mean 14.44%	SD 0%	Total	7/90 (7.78%)	Mean 7.78% SD 0%
.....							
*Kidney: Pelvis and Transitional Epithelium:							
 Papilloma							
		0/90 (0%)			0/90 (0%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule:							
 Adenoma							
		3/90 (3%)			1/90 (1%)		
Overall Incidence	Total	3/90 (3.33%)	Mean 3.33%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%
.....							
*Kidney: Renal Tubule:							
 Carcinoma							
		1/90 (1%)			1/90 (1%)		
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%
.....							
*Kidney: Renal Tubule:							
 Carcinoma or Adenoma							
		3/90 (3%)			2/90 (2%)		
Overall Incidence	Total	3/90 (3.33%)	Mean 3.33%	SD 0%	Total	2/90 (2.22%)	Mean 2.22% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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		Male			Female		
*Kidney: Renal Tubule: Lipoma							
Overall Incidence	Total	1/90 (1%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Liposarcoma							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Nephroblastoma							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Oncocytoma Benign							
Overall Incidence	Total	1/90 (1%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Polyp Adenomatous							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
#Lacrimal Gland: Carcinoma							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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		Male				Female			
*Liver:									
Cholangiocarcinoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Cholangioma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hemangioma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hepatocellular Adenoma									
		0/90	(0%)			7/90	(8%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	7/90	(7.78%)	Mean 7.78% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatoblastoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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	Male				Female			
*Liver:								
Hepatocellular Carcinoma or Hepatocellular Adenoma								
		0/90 (0%)			7/90 (8%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	7/90 (7.78%)	Mean 7.78%	SD 0%
.....								
*Liver:								
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma								
		0/90 (0%)			7/90 (8%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	7/90 (7.78%)	Mean 7.78%	SD 0%
.....								
*Lung:								
Alveolar/Bronchiolar Adenoma								
		1/90 (1%)			0/90 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma								
		0/90 (0%)			0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma								
		1/90 (1%)			0/90 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Lung:								
Sarcoma								
		0/90 (0%)			0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
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Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
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		Male				Female			
*Lung:									
Squamous Cell Carcinoma									
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
.....									
#Lymph Node, Mesenteric:									
Hemangiosarcoma									
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland:									
Adenolipoma									
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland:									
Adenoma									
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	8/90 (8.89%)	Mean 8.89%	SD 0%	
.....									
#Mammary Gland:									
Carcinoma									
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	10/90 (11.11%)	Mean 11.11%	SD 0%	
.....									
#Mammary Gland:									
Carcinoma or Adenoma									
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	16/90 (17.78%)	Mean 17.78%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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	Male				Female			
#Mammary Gland:								
Fibroadenoma								
		2/90	(2%)			63/90	(70%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	63/90 (70%)	Mean 70% SD 0%
.....								
#Mammary Gland:								
Fibroma, Fibroadenoma or Adenoma								
		2/90	(2%)			64/90	(71%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	64/90 (71.11%)	Mean 71.11% SD 0%
.....								
#Mammary Gland:								
Fibroma, Fibroadenoma, Carcinoma, or Adenoma								
		2/90	(2%)			66/90	(73%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	66/90 (73.33%)	Mean 73.33% SD 0%
.....								
#Mammary Gland:								
Myoepithelioma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
*Nose:								
Carcinoma								
		0/89	(0%)			0/90	(0%)	
Overall Incidence	Total	0/89	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma								
		0/90	(0%)			2/90	(2%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	2/90 (2.22%)	Mean 2.22% SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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	Male				Female			
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma								
		0/90 (0%)			2/90 (2%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	2/90 (2.22%)	Mean 2.22%	SD 0%
.....								
#Oral Mucosa:								
Squamous Cell Carcinoma								
		0/90 (0%)			1/90 (1%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11%	SD 0%
.....								
*Ovary:								
Cystadenoma								
					1/90 (1%)			
Overall Incidence					Total	1/90 (1.11%)	Mean 1.11%	SD 0%
.....								
*Ovary:								
Granulosa Cell Tumor Benign								
					1/90 (1%)			
Overall Incidence					Total	1/90 (1.11%)	Mean 1.11%	SD 0%
.....								
*Ovary:								
Granulosa Cell Tumor Malignant								
					2/90 (2%)			
Overall Incidence					Total	2/90 (2.22%)	Mean 2.22%	SD 0%
.....								
*Ovary:								
Granulosa Cell Tumor: Benign, Malignant, NOS								
					3/90 (3%)			
Overall Incidence					Total	3/90 (3.33%)	Mean 3.33%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
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	Male		Female	
*Ovary:				
Granulosa-Theca Tumor Benign				
		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Granulosa-Theca Tumor Malignant				
		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Luteoma				
		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Schwannoma Malignant				
		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Sertoli Cell Tumor Benign				
		1/90	(1%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11% SD 0%
.....				
*Ovary:				
Thecoma Benign				
		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0% SD 0%
.....				

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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Male					Female			
*Ovary:								
Tubulostromal Carcinoma								
					0/90	(0%)		
Overall Incidence					Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Adenoma								
					18/90	(20%)		
Overall Incidence	Total	18/90 (20%)	Mean 20%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Carcinoma								
					1/90	(1%)		
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Carcinoma or Adenoma								
					18/90	(20%)		
Overall Incidence	Total	18/90 (20%)	Mean 20%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Parathyroid Gland:								
Adenoma								
					1/83	(1%)		
Overall Incidence	Total	1/83 (1.2%)	Mean 1.2%	SD 0%	Total	0/87 (0%)	Mean 0%	SD 0%
.....								
#Peripheral Nerve:								
Paraganglioma								
					0/90	(0%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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		Male			Female		
#Peripheral Nerve:							
Schwannoma Malignant							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
#Peripheral Nerve:							
Schwannoma: Benign, Malignant, NOS							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Adenoma							
		17/89	(19%)		43/90	(48%)	
Overall Incidence	Total	17/89	(19.1%)	Mean 19.1%	SD 0%	Total	43/90 (47.78%)
							Mean 47.78%
							SD 0%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Carcinoma							
		0/89	(0%)		1/90	(1%)	
Overall Incidence	Total	0/89	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)
							Mean 1.11%
							SD 0%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Carcinoma or Adenoma							
		17/89	(19%)		44/90	(49%)	
Overall Incidence	Total	17/89	(19.1%)	Mean 19.1%	SD 0%	Total	44/90 (48.89%)
							Mean 48.89%
							SD 0%
.....							
*Pituitary Gland: Pars Intermedia:							
Adenoma							
		0/89	(0%)		0/90	(0%)	
Overall Incidence	Total	0/89	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
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		Male			Female		
*Pituitary Gland: Pars Intermedia:							
Carcinoma or Adenoma							
		0/89	(0%)		0/90	(0%)	
Overall Incidence	Total	0/89	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
*Pituitary Gland: Pars Nervosa:							
Schwannoma Malignant							
		0/89	(0%)		0/90	(0%)	
Overall Incidence	Total	0/89	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
*Prostate:							
Adenoma							
		2/90	(2%)				
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%		
*Prostate:							
Carcinoma or Adenoma							
		2/90	(2%)				
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%		
*Salivary Glands:							
Schwannoma Malignant							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
#Seminal Vesicle:							
Hemangiosarcoma							
		0/90	(0%)				
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%		

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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	Male				Female			
#Skeletal Muscle:								
Hemangioma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skeletal Muscle:								
Liposarcoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skeletal Muscle:								
Sarcoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skin:								
Basal Cell Adenoma								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skin:								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skin:								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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	Male				Female			
#Skin:								
Basal Cell Carcinoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma								
		8/90	(9%)			0/90	(0%)	
Overall Incidence	Total	8/90	(8.89%)	Mean 8.89%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Fibroma								
		2/90	(2%)			2/90	(2%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	2/90	(2.22%)
.....								
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma								
		5/90	(6%)			5/90	(6%)	
Overall Incidence	Total	5/90	(5.56%)	Mean 5.56%	SD 0%	Total	5/90	(5.56%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
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	Male				Female			
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		5/90	(6%)			5/90	(6%)	
Overall Incidence	Total	5/90	(5.56%)	Mean 5.56%	SD 0%	Total	5/90	(5.56%)
								Mean 5.56%
								SD 0%
.....								
#Skin:								
Fibrosarcoma								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		3/90	(3%)			3/90	(3%)	
Overall Incidence	Total	3/90	(3.33%)	Mean 3.33%	SD 0%	Total	3/90	(3.33%)
								Mean 3.33%
								SD 0%
.....								
#Skin:								
Hemangioma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skin:								
Hemangiopericytoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skin:								
Hemangiosarcoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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	Male				Female				
#Skin:									
Keratoacanthoma									
		5/90	(6%)			0/90	(0%)		
Overall Incidence	Total	5/90	(5.56%)	Mean 5.56%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
#Skin:									
Lipoma									
		2/90	(2%)			0/90	(0%)		
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
#Skin:									
Liposarcoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
#Skin:									
Malignant Fibrous Histiocytoma									
		0/90	(0%)			1/90	(1%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11%	SD 0%
.....									
#Skin:									
Neurofibrosarcoma or Schwannoma (malignant or NOS)									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
#Skin:									
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
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 Route: Whole Body Exposure
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	Male				Female			
#Skin:								
Osteosarcoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Pilomatrixoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Sarcoma								
		2/90	(2%)			2/90	(2%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	2/90	(2.22%)
.....								
#Skin:								
Schwannoma Malignant								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Squamous Cell Carcinoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
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	Male				Female			
#Skin:								
Squamous Cell Papilloma								
		2/90	(2%)			0/90	(0%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Squamous Cell Papilloma or Papilloma								
		2/90	(2%)			0/90	(0%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma								
		7/90	(8%)			0/90	(0%)	
Overall Incidence	Total	7/90	(7.78%)	Mean 7.78%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma								
		7/90	(8%)			0/90	(0%)	
Overall Incidence	Total	7/90	(7.78%)	Mean 7.78%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Trichoepithelioma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
#Skin: Sebaceous Gland:								
Adenoma								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

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 Route: Whole Body Exposure
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	Male				Female			
#Skin: Sebaceous Gland:								
Carcinoma or Adenoma								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%
.....								
#Spinal Cord:								
Astrocytoma Malignant								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%
.....								
*Spleen:								
Hemangiosarcoma								
		3/90	(3%)			1/90	(1%)	
Overall Incidence	Total	3/90	(3.33%)	Mean 3.33%	SD 0%	Total	1/90	(1.11%)
							Mean 1.11%	SD 0%
.....								
#Stomach, Forestomach:								
Sarcoma								
		0/90	(0%)			1/90	(1%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90	(1.11%)
							Mean 1.11%	SD 0%
.....								
#Stomach, Forestomach:								
Squamous Cell Carcinoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%
.....								
#Stomach, Forestomach:								
Squamous Cell Carcinoma or Papilloma Squamous								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

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	Male				Female			
#Stomach, Forestomach:								
Squamous Cell Papilloma								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
*Testis:								
Adenoma								
		2/90	(2%)					
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%			
.....								
*Thymus:								
Thymoma Benign								
		0/88	(0%)			1/87	(1%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	1/87	(1.15%)
								Mean 1.15%
								SD 0%
.....								
*Thymus:								
Thymoma Malignant								
		0/88	(0%)			1/87	(1%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	1/87	(1.15%)
								Mean 1.15%
								SD 0%
.....								
*Thymus:								
Thymoma: Benign, Malignant, NOS								
		0/88	(0%)			2/87	(2%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	2/87	(2.3%)
								Mean 2.3%
								SD 0%
.....								
*Thyroid Gland: C-Cell:								
Adenoma								
		8/89	(9%)			6/90	(7%)	
Overall Incidence	Total	8/89	(8.99%)	Mean 8.99%	SD 0%	Total	6/90	(6.67%)
								Mean 6.67%
								SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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 Vehicle: AIR

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		Male			Female		
*Thyroid Gland: C-Cell: Carcinoma							
		2/89 (2%)			0/90 (0%)		
Overall Incidence	Total	2/89 (2.25%)	Mean 2.25%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
*Thyroid Gland: C-Cell: Carcinoma or Adenoma							
		10/89 (11%)			6/90 (7%)		
Overall Incidence	Total	10/89 (11.24%)	Mean 11.24%	SD 0%	Total	6/90 (6.67%)	Mean 6.67% SD 0%
*Thyroid Gland: Follicular Cell: Adenoma							
		0/89 (0%)			0/90 (0%)		
Overall Incidence	Total	0/89 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
*Thyroid Gland: Follicular Cell: Carcinoma							
		0/89 (0%)			1/90 (1%)		
Overall Incidence	Total	0/89 (0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma							
		0/89 (0%)			1/90 (1%)		
Overall Incidence	Total	0/89 (0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%
#Tissue NOS: Schwannoma Malignant							
		1/90 (1%)			1/90 (1%)		
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
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	Male				Female			
#Tongue:								
Squamous Cell Carcinoma								
		0/90	(0%)			1/90	(1%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%
.....								
#Tongue:								
Squamous Cell Carcinoma or Papilloma Squamous								
		0/90	(0%)			1/90	(1%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%
.....								
#Tooth:								
Odontoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
*Urinary Bladder:								
Leiomyosarcoma								
		0/89	(0%)			1/88	(1%)	
Overall Incidence	Total	0/89	(0%)	Mean 0%	SD 0%	Total	1/88 (1.14%)	Mean 1.14% SD 0%
.....								
#Uterus:								
Adenocarcinoma								
Overall Incidence								
.....								
#Uterus:								
Adenocarcinoma or Adenoma								
Overall Incidence								
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
Contract/Lab: All Laboratories
Species: RATS
Strain: Harlan Sprague-Dawley
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Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
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Vehicle: AIR

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	Male	Female
#Uterus: Adenoma		
Overall Incidence		
#Uterus: Deciduoma Benign		
Overall Incidence		
#Uterus: Granular Cell Tumor Benign		
Overall Incidence		
#Uterus: Polyp Stromal		
Overall Incidence		
#Uterus: Sarcoma		
Overall Incidence		
#Uterus: Sarcoma Stromal		
Overall Incidence		

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied

Version: Nov2019
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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	Male	Female
#Uterus: Sarcoma Stromal or Polyp Stromal		
Overall Incidence		
.....		
#Uterus: Schwannoma Malignant		
Overall Incidence		
.....		
#Uterus: Squamous Cell Carcinoma		
Overall Incidence		
.....		
#Vagina: Granular Cell Tumor Benign		
Overall Incidence	Total 0/90 (0%)	Mean 0% SD 0%
.....		
#Vagina: Polyp		
Overall Incidence	Total 0/90 (0%)	Mean 0% SD 0%
.....		
#Vagina: Schwannoma Malignant		
Overall Incidence	Total 1/90 (1.11%)	Mean 1.11% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Nov2019
Contract/Lab: All Laboratories
Species: RATS
Strain: Harlan Sprague-Dawley
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Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
Route: Whole Body Exposure
Vehicle: AIR

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	Male				Female			
#Zymbal's Gland:								
Carcinoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Zymbal's Gland:								
Carcinoma or Adenoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied